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PAPER TRADE JOURNAL

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY

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FIFTY-THIRD YEAR

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Vol. LXXIX. No. 16 NEW YORK AND CHICAGO, OCTOBER 16, 1924 { Per Annum, $4.00 { Single Copy, 10 Cents

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PAPER TRADE JOURNAL

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FIFTY-THIRD YEAR

Published Every Thursday by the

LOCKWOOD TRADE JOURNAL CO., INC.

LESLIE R. PALME' PRESIDENT — GEO. S. MACDONALD VICE-PRESIDENT & TREAS — F. K. HOPPIE SECRETARY

10 EAST 39TH ST. N.Y. U. S. A

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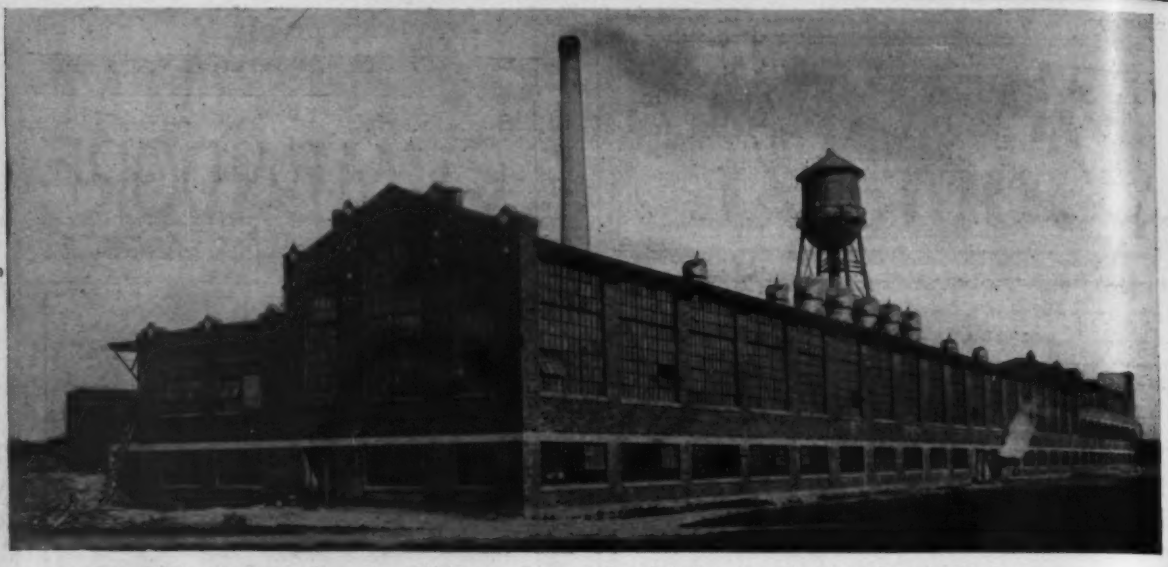

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BUILDING activity in the paper industry includes the following projects now under way by The Austin Company.

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PAPER TRADE JOURNAL

Vol. LXXIX. No. 16 NEW YORK AND CHICAGO Thursday, October 16, 1924

PAPER PRODUCTION GAINS 7 PER CENT IN AUGUST

Summary Prepared By the American Paper and Pulp Association in Connection with its Affiliated Organization Shows That Production Is Making Slow Increase—Statistics Furnished By the United States Pulp Producers Association Shows That Production of Domestic Wood Pulp Made an Increase of 10 Per Cent in All Varieties Except Kraft

The August production of paper in the United States, as reported by identical mills to the American Paper and Pulp Association and co-operating organizations, showed an increase of 7 per cent over July's production, according to the Association's Monthly Statistical Summary of the pulp and paper industry.

This Summary is prepared by the American Paper and Pulp Association, as the central organization of the paper industry, in co-operation with the Binders' Board Manufacturers' Association, News Print Service Bureau, Tissue Paper Manufacturers' Association, Wrapping Paper Manufacturers' Service Bureau, and Writing Paper Manufacturers' Association.

The figures for August are as follows:

Grade	Number of Mills	Production, Net Tons	Shipments, Net Tons	Stocks on Hand End of Month, Net Tons
News print	65	116,477	115,997	28,207
Book	62	80,136	81,043	37,291
Paper board	109	119,633	121,452	34,943
Wrapping	84	46,521	46,971	65,545
Bag	25	8,927	9,699	6,029
Fine	83	22,013	22,987	39,436
Tissue	42	10,199	11,240	9,179
Hanging	8	3,559	3,747	3,794
Felts	21	17,466	17,517	4,510
Other grades	59	17,723	18,981	14,163
Total—all grades	..	442,654	449,634	243,097

During the same period, domestic wood pulp production increased 10 per cent, an increase appearing in all grades except Kraft. The August totals, as reported by the American Paper and Pulp Association, through the United States Pulp Producers' Association, are as follows:

Grade	Number of Mills	Production, Net Tons	Shipments, Net Tons	Stocks on Hand End of Month, Net Tons
Groundwood pulp	104	75,751	4,438	141,917
Sulphite, news grade	39	34,789	3,047	12,861
Sulphite, bleached	19	17,460	3,111	2,476
Sulphite, easy bleaching	6	4,027	404	246
Sulphite, Mitscherlich	6	5,921	848	460
Sulphate pulp	12	12,060	1,745	6,320
Soda pulp	12	14,217	3,257	3,318
Other than wood pulp	2	39	.....	41
Total—all grades	..	164,264	16,840	167,639

October 5, 1924.

That the work of the American Paper and Pulp Association in compiling consolidated statistics of the paper industry has been of great value to the paper industry is shown in an annual review of the work which has been sent to the co-operating mills by Dr. Hugh P. Baker, executive secretary of the Association. He says:

"You will remember that when we took this summary over as it was laid down in June, 1923, by the Federal Trade Commission, there was some question as to whether it would be possible to secure statistical reports from manufacturers on a voluntary basis that would give results comparable to statistics gathered by the Federal Trade Commission, where there was more or less compulsion.

"With the cordial assistance of both affiliated and unaffiliated associations in the industry, particularly the Writing Paper Manufacturers Association, the Wrapping Paper Manufacturers Service Bureau, and the News Print Service Bureau, we have been able to secure reports from a large enough number of mills in the various groups to make the resultant reports of very definite value to the industry.

"The number of mills reporting their production, shipments and stocks to us regularly has increased in a number of the grades during the first year of the work. A persistent effort is being made to secure reports from all of the mills represented in the several grades of pulp and paper.

"In addition to the prompt and accurate compilation of these monthly summaries for the entire industry, the Association is handling the statistical work of several of its affiliated organizations."

Paper Specifications Schedule Completed

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., October 22, 1924.—The Paper Specifications Committee of the Joint Congressional Committee on Printing has completed a tentative schedule for paper for the Government Printing Office for the fiscal year beginning March 1, 1925.

The Committee has departed from its usual custom in that it is sending out to its whole list of mills, jobbers, etc., a copy of the tentative schedule asking for any criticisms or suggestions which the manufacturers or jobbers have to make and requesting that these suggestions be returned to Washington on or before November 15. The Committee has to make its report to the Joint Committee as soon as Congress convenes early in December.

A number of changes have been made in the schedule and especial attention is being called in the letter of transmittal to the folding endurance on bond papers. It is the claim of members of the Specifications Committee that the various changes made in the schedule should be beneficial to the paper mills and make it easier for them to bid on the schedule. F. P. Veitch, chief of the Paper Laboratory of the Bureau of Chemistry is chairman of the Specifications Committee and Ansel Wold, clerk of the Joint Congressional Committee on Printing, is secretary of the committee.

Lime Used in the Paper Industry

According to a report of the U. S. Geological Survey paper mills bought 311,309 tons of lime in 1923 valued at $2,768,909, compared with 310,229 tons for 1922 worth $2,683,487.

NEW BRUNSWICK NOW FACES A NEW INDUSTRIAL PROBLEM

Lumbermen Realizing That Water Powers Are Not Sufficient to Attract a Single Large Industry—Quebec Pulp and Power Corp. to Take Over Saguenay Pulp and Power Co.—St. Maurice Pulp and Paper Co. Completes Hydro-Electric Development—Winnipeg to Have New Pulp Mill—Canada's News Print Capacity Materially Increased—Paper Workers Open New Branch.

[FROM OUR REGULAR CORRESPONDENT.]

MONTREAL, Que., October 14, 1924.—New Brunswick is faced with a new industrial problem. The lumbermen are beginning to realize that the future of its forest industry lies in the production of news print paper for which its spruce and fir are peculiarly adapted. But most of its water powers, taken separately, are not sufficient to attract a single large industry, say, of the magnitude of a 50-ton news print mill, which would require about 5,000 continuous h.p. The problem was taken up by the New Brunswick Hydro Commission, and a solution was presented by the chief engineer, S. R. Weston, at a meeting of the Union of Municipalities in Moncton. In all, the province possesses about 100,000 continuous h.p., which could be increased to 200,000 for twelve hours by a general system of storage under unified control. Mr. Weston pointed out that, in the interests of economy and conservation, these water powers should not be treated separately, but as far, at least, as generation is concerned, they must be treated collectively as integral parts of one system. He, therefore, advocated public ownership of all the water powers of the province.

New Company to Take Over Saguenay Pulp

A new company named the Quebec Pulp and Power Corporation will shortly take over the Saguenay Pulp and Power Company and its main subsidiary, the Chicoutimi Pulp Company. It is understood that a satisfactory arrangement has been arrived at for the exchange of bonds. Important future plans of the company are connected with a further amount of $2,000,000 of bonds, which will be authorized but not sold until these plans mature. The purpose is to erect a news print mill at Chicoutimi with a capacity of about 200 tons daily, or 60,000 tons per annum. This will be a comparatively inexpensive affair, the mill will require only the news print machines, as the company already has pulpwood mills with a capacity of 100,000 tons per annum, or between 40,000 and 50,000 tons more than will be required for the news print production. The other constituent, sulphite pulp, it is understood, is likely to be secured from the Bay Sulphite Company, now the Port Alfred Pulp Corporation. This production of news print, in a sense, will not add to the surplus, as it will mean simply the consumption of 50,000 or more tons of groundwood pulp which are now being shipped to the United States and England, to be converted into newsprint in these countries.

New Power Development Completed

Some surprise has been caused in Montreal by the announcement that the St. Maurice Pulp and Paper Company, a subsidiary of the Shawinigan Water and Power Company, has completed its big hydro-electric development at La Gabelle on the St. Maurice River, five and one-half months ahead of schedule. At the present time, the four installed units are delivering approximately 100,000 twenty-four-hour h.p. Rated capacity of the plant is 120,000 h.p. Output of power will be steadily increased from now on, leaving, of course, the usual "peak" load balance available. All of the power developed at the St. Maurice Company's plant is delivered over four transmission lines to the Shawinigan Water and Power Company, Limited. Two transmission lines extend from La Gabelle to Shawinigan Falls, and four lines to Three Rivers. In a little less than two years the La Gabelle and Gres Falls on the St. Maurice River have been harnessed. They have been converted from their natural state to their present point, industrial efficiency and usefulness.

New Pulp Mill for Winnipeg

The Manitoba Government is inviting tenders for the sale of 3,000,000 cords of pulpwood from available Dominion and school lands within that part of Manitoba reserved as a pulpwood area. This means that the pulp and paper mill project which the J. D. MacArthur interests propose to erect in Winnipeg or St. Boniface is expected to materialize shortly as the MacArthur Company will be a bidder for the pulpwood under the terms laid down by the government. These terms are that a pulp and paper mill costing not less than $2,000,000 shall be erected with a daily output of not less than 100 tons of pulpwood, 50 tons of which are to be made into paper at the mill.

Capacity of Canadian News Print Mills

When the various newspaper machines that are being installed in Canadian news print mills are in operation (and the last of them is expected to be completed by the end of the present year), Canada will have a news print production capacity of 1,512,000 tons per annum, which will aproximate the rated capacity of American paper mills. The details of the production when all the new machines are running will be as follows:—

Name of Mill	Tons Daily	Capacity Yearly
Abitibi	500	150,000
Bathurst	60	18,000
Belgo	385	115,000
Booth	145	43,500
Brompton	120	36,000
Canada	45	13,500
Donnacona	210	63,000
Eddy	160	48,000
Fort William	160	48,000
Laurentide	375	112,500
Kenora	100	30,000
News	30	9,000
Ontario	300	90,000
Pacific	220	66,000
Powell River	225	67,500
Price Bros.	500	150,000
St. Maurice	250	75,000
Spanish River	700	210,000
St. Lawrence	160	48,000
Fort Frances	150	45,000
International	260	78,000
	5,055	1,516,000

Paper Workers Open Branch

After a three days' convention in the Mount Royal Hotel, Montreal, the International Brotherhood of Pulp, Sulphite and Paper Workers of North America has decided to open a branch office in Canada, either in Montreal or Three Rivers. Fifty delegates, representing 10,000 workers, attended the convention, John P. Burke, president and secretary, being in the chair.

Two Canadian members of the Brotherhood were elected to the International Executive Board, Maurice Lebelle, of Ottawa, who was also re-elected third vice-president; and Alex. Gibson, Port Arthur, Ontario, also elected sixth vice-president.

Election of officers resulted as follows: President and secretary, John P. Burke, re-elected for eighth term; first vice-president, H. W. Sullivan, Orono, Maine, re-elected; second vice-president, John Connelly, Palmer, New York, re-elected; third vice-president, Maurice Lebelle, Ottawa, re-elected; fourth vice-president, Edward Launer, Oregon City, Oregon; fifth vice-president, J. W. Taylor, Pejepscot, Maine, re-elected; sixth vice-president, Alex. Gibson, Port Arthur, Ont.

The Mayor of Iroquois Falls went down to defeat in the elections, vacating his office as sixth vice-president.

CHICAGO PAPER BUSINESS CATCHING NORMAL STRIDE

Fine Papers Make a Sturdy Advance and Coarse Papers Are Finding a Stronger Market—Prices Go Up on Some Items of Paper Stock and Down on Others—Death Comes Suddenly to Seth W. Jones, Well Known Paper Salesman—Box Board Association Holds Interesting Monthly Meeting—Plant of S. Birkenstein & Sons Slightly Damaged by Fire in Adjoining Lumber Yard.

[FROM OUR REGULAR CORRESPONDENT.]

CHICAGO, Ill., October 13, 1924.—Production of paper has a hard job to keep pace with demand, according to reports reaching this territory. And this situation is pretty general throughout the entire industry. It isn't to be regretted, however, by any means. The wider becomes the difference in production and demand, representing the time required before an order placed can be filled by the mill, it seems that the higher goes everybody's optimism.

In fine papers particularly the pickup has been noticeable. Week by week tendencies have become stronger toward larger orders until most consumers are back on normal time purchasing. Printers too are buying much better. Almost any one of Chicago plants will admit that the past three months were pretty dull ones for them. Catalog publishing is more active at present. Advertising matter contributes generously toward keeping the industry busy and it is expected that after November elections a real spurt all along the line will be witnessed.

Prices on fine papers have held pretty steady. The market has firmed up considerably in the last thirty days, but no advances have been announced. There are none expected and some of those rumored will not materialize, it is believed.

Stronger Market for Coarse Papers

A stronger market for coarse papers is enjoyed by those serving that trade. Kraft and manilas particularly are under strong demand with evidence of increasing buying right along. It is reported that eastern mills producing high quality paper in coarse lines are running with from six to eight weeks orders booked in advance. One of these mills produces a very fine manila. This merchant stated that this demonstrates the advisability of handling only the best papers obtainable and dropping ordinary stuff. He also said that the mills making high quality paper were the least affected when the slack season came and were the first to recover. To him this is enough indication of the value of such a merchandising change.

Most of the recovery of boards and containers has already taken place it seems, for not much improvement was experienced during the last week. Containers are holding fairly steady. Mills have orders ahead and are running at capacity. Box makers have not taken the quantities of board they were expected to take but factors still look for revival in that end. Efforts have been made to brace the market on manila line chip. Demand runs pretty even.

Paper Stock Prices Go Both Ways

Prices of paper stock during the past week went both ways. That is, some went up and others went down. The lower grades declined, some of them quite considerably while there were several spectacular jumps in higher grade stock. It was expected that the reaction of two weeks back, which was the result of a rapidly rising market for the last month, would be only temporary, but the adjustment seems to favor a longer period of decline than was anticipated. Besides, accumulations have gradually taken on larger proportions. So with a lower demand and larger stocks it is very natural that prices should come down. In all probability, however, they will not recede further, unless something unforeseen occurs. Envelope cuttings of various kinds, on the other hand, went right up to much higher figures. At the end of the week new kraft cuts were announced at $54 per ton, representing a remarkable increase.

Seth W. Jones Dies Suddenly

Seth W. Jones, one of the best known and well liked paper salesmen in this section of the country, died suddenly the other day while playing golf at the Greenview Club near Chicago. He collapsed, and died from a cerebral hemorrhage as he was being taken to the Oak Park Hospital. Mr. Jones had a host of friends both in business and social circles who count his passing as a personal loss. Up to three months ago he was associated with the Barton-Hobart Paper Company in the sales department, but his health became so impaired that he resigned to spend a few months in the open in an effort to regain it. He was expecting to affiliate himself with the Advance Bag and Paper Company.

Fire Does Some Damage to Birkenstein

Fire originating in a lumber yard next door wrought some damage to the plant of S. Birkenstein & Sons, at 1030 W. North Avenue, early last week. The Birkenstein firm, besides other lines, handles roofing stock. One frame building was destroyed. Damage to the sum of about $10,000 was done by the fire in the lumber yard.

Box Board Association Meets at Drake

On Wednesday, October 8, the Box Board Association held its monthly meeting at the Drake Hotel. It proved to be quite a representative gathering and the attendance was very gratifying. Much discussion centered in the forms for reporting statistical work on the part of members and it is expected that a definite form will be selected. Routine business absorbed practically all of the time at the sessions.

It is announced by Manager John R. Mauff, of the Box Board Association, that Secretary of Labor Davis will call a meeting of the industry soon after the first of the new year to report on progress made toward an eight-hour, five-day week. It is supposed that by that time all of the industry will be on that basis.

Activities of the Paper Trade

Bob Butterworth, of the Chicago office of the Champion Coated Paper Company, left to spend the week end at the firm's headquarters and mill in Hamilton, Ohio.

Some of the first to arrive in Chicago for the big meeting of the National Paper Trade Association were Lance Currier, of the Pratt Paper Company, Des Moines, Iowa, and H. J. Hodgins, president of the Central Topeka Paper Company, of Topeka, Kans. Mr. Hodgins was accompanied by Mrs. Hodgins, both of whom arrived on Sunday morning. Mr. Currier landed early Monday morning.

E. A. Hall, Jr., sales manager of the Pilcher-Hamilton Paper Company, and Henry W. Borchardt, one of the salesmen and editor of the firm house organ, "Bookan-Wrap", attended the distributors conference held by the Croker McElwain Company, at Hotel Nonotuck, Holyoke, Mass., recently. Both enjoyed the conference very much. Mr. Hall said that everybody went back home with more enthusiasm for this firm's products.

Body of Sir William Price Found

MONTREAL, Que., October 14, 1924.—The body of Sir William Price, President of Price Bros. & Co., who lost his life in a landslide at Kenogami, on October 2, was found on Saturday afternoon last, in the Saguenay River, near St. Fulgence, about fifteen miles from where the landslide occurred, and about five miles below Chicoutimi. The body was taken to Chicoutimi and thence to Kenogami, accompanied by hundreds of employees of Price Bros. & Co. Burial took place at Kenogami today and at the same time a memorial service was held in the Cathedral of the Holy Trinity, Quebec. Those attending the funeral at Kenogami included Mr. and Mrs. J. H. Price, Mr. and Mrs. A. C. Price, Miss Willa Price, Miss Helen Price, H. E. Price, A. J. Price and son, J. N. McCarthy, J. L. Apedaile, W. S. Hofstra, Col. J. A. Scott, Chas. Torrans, R. H. Nishbet, A. S. Gravel and Jos. Dinan.

ONTARIO PAPER OUTLOOK GETTING CONSTANTLY BETTER

Hastings Paper Mills the Successors of Belleville Paper Mills—Program for Seventh Annual Convention of Canadian Paper Trade Association—Garden City Paper Mills Co., Ltd., to Operate Plant of National Paper Products Co.—American Sales Book Co., Ltd., Plans Business Expansion—Pulpwood Stranded Two Years Floats Down Stream—Jottings of Industry.

[FROM OUR REGULAR CORRESPONDENT.]

TORONTO, Ontario, October 13, 1924.—Business in the paper line continues to get a little better all the while and most of the mills are pretty busy although by no means rushed. Manufacturing stationers report a good run of orders and jobbing houses state there is a considerable change in business in the small towns. Farmers are feeling better as a result of a good crop and higher prices and have changed their mental attitude regarding things in general to a considerable degree. Collections are still slow and have to be watched closely but most concerns in the paper line are operating conservatively and have kept costs down to as low a notch as possible. The result is that they will come through the year better than a number of them expected a few months ago.

In the rag market there is a good demand for all grades including new cotton cuttings and No. 1 white shirt cuttings. Prices are firm and advancing. There is also a good call for thirds and blues and manila rope. The supplies of all classes of rag stocks are rather short which accounts for the higher values now prevailing. Old papers have dropped slightly but book and white grades are holding up well. Mixed papers are a little weaker, and only in moderate demand. E. Pullan, the "waste paper king," who had the contract for the collection of the old Bell telephone books in Toronto, gathered in about one hundred tons of waste paper from this source.

Hastings Paper Mills Formed

The Hastings Paper Mills are the successors of the Belleville Paper Mills, Belleville, Ont., and have completed arrangements for the operation of the plant which was closed down for some time. The mills will resume running under the management of O. A. Porritt, who was connected with the old company. Straw papers and corrugated paper carpet linings will be turned out.

New Offices for Lincoln Mills

Lincoln Mills, Limited, with sales offices in Toronto and plant at Merritton, have removed their local quarters from King street, west, to room 701, in the General Assurance Building, Bay street, where they have much larger and more attractive accommodations. Lincoln Mills are still being operated under R. Home Smith, Receiver and Manager.

Long Price List Up Again

At a meeting of the Toronto Typothetæ, which was held last week, a letter was read from the Canadian Paper Trade Association stating that the paper mills in future would issue new lists on a net price basis. The long price list has been in effect for the last two years and the arrangement expires this month. The Typothetæ discussed the matter in detail and will, it is understood, exercise every effort to have the long price list continued. Much objection to the latter has come from rural printers and others in outside centres.

Program for Paper Trade Convention

The seventh annual convention of the Canadian Paper Trade Association will be held in Toronto on October 21 and 22. An interesting program has been outlined and reports from the trade sections will be presented by E. A. Schofield, St. John, for the Maritime section; T. Havill, of Montreal, for the Quebec section; Fred W. Halls, Toronto, for the Ontario section; A. C. Hunt, Winnipeg, for the prairie section, and C. J. Kay, Vancouver, for the British Columbia section. L. P. Turgeon will speak on "The Net Profit on Sales." On Tuesday evening, October 21, the visiting members will be the guests of the Ontario members at a banquet at the King Edward Hotel. Among the other subjects to be discussed during the convention will be "Mills' Relations"; "Continuing the Discounts on Assorted Tons"; "Protection to the Wholesale Merchant by the Manufacturer"; "The Long Price List"; "Trade Customs"; "Two and Three-ton Arrangement," etc. It is expected that the forthcoming gathering will be the most successful in the history of the Association.

Paper Business Is Transferred

The business and plant of the National Paper Products Company, Brockville, Ont., is being removed to St. Catherines, Ont., where it will be operated by the Garden City Paper Mills, Company, Limited. Public service towels, both standard and junior sizes, will be put upon the market and also a very attractive line of no-waste cabinet toilet tissue. The improved products will be backed up by an active selling campaign through the regular connections of the National Paper Products Company.

Sales Book Company Is Busy

The proceeds of a recent bond issue by the American Sales Book Company, Limited, of which S. J. Moore, Toronto, is president, will be used to provide additional equipment and a working capital required to take care of an expansion of the business. The company has just sold 1,000,000, 6 per cent 15-year, first mortgage, sinking fund bonds and will retire $215,000 of its bonds at present outstanding which represent the balance of an issue of 15-year securities made in 1912.

Stranded Pulpwood Is Released

Pulpwood cut two years ago in some instances abandoned as lost due to lack of water to float it to the mills in the Port Arthur and Fort William district, is now making its way down many streams and is being reclaimed, according to a leading pulpwood operator in Fort William. He believed that the unexpected turn in events brought about by the recent heavy rain spells, will cause a reduction in the proposed cut of some operators during the coming winter.

Engaging Men for Northern Camps

Major J. I. Hartt, of Orillia, supervisor of Crown Timber Agencies, who recently returned to his home from an extended trip throughout the lumber and pulpwood camps in Northern Ontario, on learning that a deputation of unemployed had waited upon the Orillia Town Council, stated that he was prepared to find work in the bush for 100 men at wages from $28 to $38 a month, with board and transportation paid by the camps. Major Hartt says there is a strong demand at present for men in the bush.

Notes and Jottings of the Industry

I. H. Weldon, of Toronto, President of the Provincial Paper Mills, was a visitor to Montreal during the past week.

Charles E. Buss, of Thorold, general superintendent of the Provincial Paper Mills, paid a visit to the company's plant at Mille Roches, Ont., lately and inspected the improvements which have been carried out there. The company's program of extension and construction has been completed for the present season.

W. P. Bennett of Toronto, former President of the Canadian Paper Box Manufacturers' Association, spent last week in New York on business.

Celotex Co. Increases Stock

CHICAGO, October 14, 1924.—The Celotex Company with general offices at 645 Michigan avenue, here and a board mill at Marrero, La., has filed notice of an increase in its capital stock from $2,200,000 to $3,000,000. The company manufactures insulation and building board from baggasse.

MATHIESON System

Convincing Evidence!

THE following prominent paper mills use and indorse the Mathieson System for preparing bleach liquors from Liquid Chlorine:

Champion Fibre Company, Canton, N. C.
Consolidated Water Power & Paper Co., Appleton, Wis.
Crystal Tissue Company, Middletown, Ohio
Dill & Collins Company, Philadelphia, Pa.
District of Columbia Paper Mfg. Co., Washington, D. C.
Hammermill Paper Company, Erie, Pa.
Hamersley Mfg. Co., Garfield, N. J.
Mead Fibre Company, Kingsport, Tenn.
Nekoosa-Edwards Paper Company, Port Edwards, Wis.
Port Huron Sulphite & Paper Company, Port Huron, Mich.
Provincial Paper Mills, Port Arthur, Ontario, Can.
Riordon Pulp Corp., Hawkesbury, Ont., Can.
S. George Company, Wellsburg, W. Va.
Sweet Bros. Mfg. Co., Inc., Phoenix, N. Y.
The Smith Paper Company, Lee, Mass.

Could there be any more convincing evidence of the superiority of our system than the names in the above list?

The MATHIESON ALKALI WORKS Inc.
25 WEST 43rd STREET NEW YORK CITY
PHILADELPHIA PROVIDENCE CHICAGO CHARLOTTE

EAGLE THISTLE PRODUCTS

Deal Direct with the Manufacturer

Bicarbonate of Soda
Liquid Chlorine-Caustic Soda
Sesquicarbonate of Soda
Bleaching Powder-Soda Ash

PHILADELPHIA PAPER TRADE BEHIND OCTOBER STANDARD

Business Is on Up Grade, But Demand Still Lags Behind Normal Call of This Time of Year—Addresses Discussed at Meeting of Coarse Paper Division—Waste Industry Dealers Perfect Their Organization—Employers and Employees of Paper Manufacturing Co. Hold Banquet—Paper Stock Damaged in Fire at Warehouses of Dee Paper Co.—Unite with Advertising Club.

[FROM OUR REGULAR CORRESPONDENT.]

PHILADELPHIA, Pa., October 13, 1924.—While the paper trade generally is on the up grade and demand is broadening in all lines of both divisions of the industry, there still is the absence of customary freer buying that came with early October days of other years. Although distributors had looked for even better business they are encouraged with the fair amount of orders that have been actually booked.

In the class of market leaders the Fine Paper Division tops the list with the print shops and publishers the principal buyers. The heaviest demand centers in the book and coated papers with prices holding firmly near the low quotations attained during the summer months. Ledgers and writings for stationery conversion into blank books, loose leaf devices and bookkeeping purposes have been among the active list of commodities that now are freely moving after a long period of inactivity due to the quietness prevailing in the stationery trade for almost half a year.

Coarse Papers Market Brisker

With the absence of the customary fall boom in this section of the paper trade there nevertheless is a fair amount of business coming into the coarse paper houses to keep shipping departments employed in the moving of larger quantities of all the grades of krafts, boards, wrappings and other specialties consumed by the stores and larger manufacturing concerns. In the kraft market there still is the keenness of competition that brings about price concessions and many offerings are far below the prices of last spring when the price war began, and which brought values to below pre-war days. Prices in other grades have been holding fairly well with a few exceptions of advancing tendency. Grey bogus was in the latter class with the quotations $5 per ton above those of last month. Sheathing and building papers were unchanged with little activity but felt papers used in the building trade were fractionally higher at an advance of ¼ cent. Chip board is holding at its higher price quoted last month at $47.50.

A reaction from the temporary boom which hit the stock market in the closing days of the summer season has set in and the dealers are now marking time until the mills again come into the market.

Coarse Paper Division Meets

With the gathering of the distributors at the monthly meeting of the Coarse Paper Division of the Philadelphia Paper Trade Association in the Bourse, last Thursday, there was unanimous expression of approval and appreciation on the part of the paper men for the instructive and constructive talks given by Secretary W. C. Ridgway of the National Association and Statistician N. A. Schoenbucher at the general gathering of paper distributors and salesmen held in the previous week at the Bourse. Simon Walter, head of the S. Walter, Inc., was the chairman of the coarse paper meeting and, in his informal discussion of the addresses of Secretary Ridgway and Mr. Schoenbucher, voiced the enthusiasm of the paper men over the effectiveness of the inspirational talks given for the benefit of both employer and employees of the sales organization. This get-together meeting of the sales organizations and the paper distributors was the first in the history of the local Paper Trade Association and the results of the meeting were shown in the renewed and concentrated efforts of the salesmen along the lines suggested by the speakers for the revival of business and the development of efficiency in the sales field. Secretary Ridgway talked on the work of the National Association, its aim, scope and results while Mr. Schoenbucher gave the three phases of constructive paper salesmanship and outlined a plan for the effectiveness in practical dollars and cents return by the development of these in contact with the paper consumer. Other speakers from the local trade association were President Morgan H. Thomas, of Garrett-Buchanan Company; Leon Beck of the Charles Beck Company, and George W. Ward of the D. L. Ward Company.

Paper Stock Dealers Dine

When the members of the reorganized Philadelphia Paper Stock Dealers' Association met at the Lorraine Hotel last Thursday evening, there was perfected the assemblage of the entire waste industry dealers into an entirely new trade association of associates in various branches of the industry united with the old established organization of wholesalers in paper stock exclusively. There were 45 dealers of the waste trade present and around the banquet table the members took up the questions of changes in by-laws and constitution of the association whereby there was brought into effect a new organization composed of general waste trade associates and including the three branches into which the association will be subdivided. This change in the constitution and by-laws was adopted and then President Evan G. Badger, of the former Philadelphia Paper Stock Dealers' Association proposed that the newly-formed body be entitled The Waste Merchants' Association, with the approval of all present. Following the change of title the waste association then took up the amendment to the constitution which provided for the subdivision of the organization into three distinct branches—the paper stock, rag and waste and the metal dealers, each to have its own governing body with a chairman as its head and all controlled by the Waste Merchants' Association. Each branch will provide for its own trade customs and resolutions pertaining to the conduct and regulation of business in its particular division of the waste trade. Another change in the by-laws provides for the settlement of all disputes among the members of the association by arbitration. The officials of the new organization are: President, Evan G. Badger; vice-president, Thomas A. Kenny; treasurer, William L. Simmons and secretary, William J. McGarity, all formerly holding similar offices in the old Paper Stock Association.

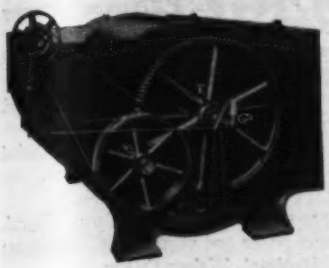
Paper Manufacturing Co. Banquet

The link of goodfellowship between the employers and the employees of the Paper Manufacturing Company, was more firmly welded last Wednesday evening when there gathered at the festive board over 90 associates of the coarse paper house in the first of the annual banquets to be instituted as a permanent feature of the social life of this business family. The banquet was held in the spacious shipping room of the half million dollar home of the Paper Manufacturers Company, recently constructed and was followed by a vaudeville entertainment and dancing. The shipping room was decorated in the national colors for the event.

During the dinner President Frank A. O'Neill welcomed the employees and urged them to continue the co-operation which has brought success to the firm. Following his talk Manager V. A. Dirvin, toastmaster, thanked President O'Neill for the ideal working conditions and the personal interest he took in the welfare of the workers. Secretary F. W. Coar outlined the growth of the firm with particular reference to the perfection and expansion of the Small Roll Department, now one of the most important sections of the business and among the largest in the eastern states. On behalf of the workers, Charles P. Bond, senior salesman, William C. Carpenter of the Sales Division, and N. M. Glynn, also office manager, expressed gratification for the esteem showed by the firm

(*Continued on page* 36)

BIRD MACHINERY



The BIRD SAVE-ALL

A MILL equipped with Bird Save-Alls and Self-Cleaning Shower Pipes actually saves more stock and water and is using the best known means to insure a "closed system."

A Bird Save-All recovers the escaping fibres from the white water and detects any leaks in the stock handling system.

The Bird Self-Cleaning Shower Pipe, by safely using white water for the showers, cuts down fresh water requirements tremendously.

The combined use of the Bird Save-All and Self-Cleaning Shower Pipe saves the two most valuable commodities handled by the paper mill—stock and water. May we send catalogs describing these products?

BIRD Self-Cleaning SHOWER PIPE

BIRD MACHINE COMPANY
SOUTH WALPOLE ~ MASSACHUSETTS

Western Representative
T. H. Savery, Jr., 1524 Republic Bldg.
Chicago, Ill.

Canadian Builders of Bird Machinery
Canadian Ingersoll-Rand Co., Limited
260 St. James Street Montreal, Canada

7302

New York Trade Jottings

H. B. Donovan, sales manager of the Canada Paper Company of Toronto, was a visitor here for several days the past week.

* * *

The Import Committee of the Paper Industry held a meeting last week Wednesday at which a few routine matters were passed upon.

* * *

The News Print Service Bureau will hold its fall meeting at the Hotel Commodore on Wednesday, October 22. An interesting program has been provided for.

* * *

George G. Jacob of Alexander Jacob & Co., London, will sail for this country on the *Mauretania* on November 1 and will make his headquarters at the Hotel Commodore during his stay in this city.

* * *

Owing to the fact that Columbus Day fell on Monday this week the regular Monday gathering of the Salesmen's Association was omitted.

* * *

The next meeting of the Box Board Association will be held on Monday, November 17, at the Roosevelt Hotel, this city. The session will be called to order at 10:30 a. m.

Will Some One Answer This?

NEW YORK, October 14, 1924.

Editor PAPER TRADE JOURNAL: We are storing coated cardboard in cases, bond papers and other papers in bundles, as well as cases, and in the sub-basement, one floor below where we are stocking these goods, there is a steam boiler which supplies heat to the whole building.

We are wondering what effect this boiler, going all the time, would have on the cardboard, paper, etc. Will the close proximity of this heat given off by the boiler tend to spoil these stocks, and what, if any means, could you suggest to counteract this condition, assuming that it is harmful. PAPER WAREHOUSE.

Want Tariff for Pulp in South

ALEXANDRIA, La., October 14, 1924.—Dr. W. D. Haas, President of the Louisiana Bankers' Association and Col. Wm. Polk, chairman of the Industrial Bureau of the Alexandria Chamber of Commerce, have just returned from New Orleans where they attended the Southern Tariff Association convention.

Dr. Haas discussed the "relationship of the tariff on general business" and Col. Polk, spoke of the future development of the paper and pulp industry in the south, and the necessity of proper tariffs to help stimulate the growing of timber for the manufacture of paper and paper pulp. In his remarks Col. Polk said: "The question of growing timber is one of greatest importance to that territory which has been denuded of its timber. These lands are the best suited for the reproduction of paper pulp stock. At the present time a large amount of paper is being imported into this country from Germany and the Scandinavian Peninsula, and these countries are reforesting their lands continuously. I believe a tariff should be levied that will, at least, put the growing of timber in the south, on a competitive basis, without lowering the standard of living in this country."

A Correction

It was incorrectly stated in the trademark department of the PAPER TRADE JOURNAL of September 25, 1924, that an application for registration No. 197,366 for the word "Dexstar" had been filed by The Tissue Company. The word "Dexstar" has been adopted by C. H. Dexter & Sons of Windsor Locks, Conn., and the application for registration was by that concern.

Recent Incorporations

P. GUARIGLIA & SONS, Manhattan, New York, pulp. Capital $50,000. Incorporators P. and R. Guariglia, P. Torrace. Attorney, J. Bregman, 233 Broadway, New York.

ADAH PAPER CO., Cincinnati, Ohio, 150 shares, no par, $10,000. Incorporators Edward F. Peters, Ralph L. Hinds.

CINCINNATI PRINTING AND PAPER PRODUCTS COMPANY, Cincinnati, Ohio. Capital $10,000. Incorporators F. H. Blythe.

GOLD MEDAL PAPER BOX CO., Brooklyn, New York. Capital $5,000. Incorporators S. Snowman, M. Scharf, C. Schwartz. Attorneys, Mandel & Schwartz, 914 Broadway, New York.

WABASH FIBRE BOX COMPANY, Terre Haute, Indiana. Sapital, $150,000. To manufacture paper boxes and other goods. Directors: William M. Myers, Ward S. Hubbard, Walter C. Ely.

GROUND WOOD CORPORATION, Manhattan, New York. Make paper. Capital, $5,000. Incorporators: C. Snyder, M. V. Cornell, T. Tabanda. Attorneys, Sayer Bros., 67 Liberty street.

GLOBE PAPER MILLS SUPPLY CORPORATION, Manhattan, New York. Capital, $10,000. Incorporators: L. Peters, M. Drucker, A. Yovits. Attorney, H. Steinbock, 335 East 149th street, Bronx, New York.

WEST COAST PULP AND PAPER COMPANY, INC., Olympia, Washington. Pulp and paper products. Capital, $1,250,000. Incorporators: H. S. Gile, John H. McNary and William H. Trindle, all of Olympia.

INTERIOR PULP AND PAPER COMPANY, New York, Delaware manufacture bags, envelopes. Capital, $8,500,000. Incorporators, United States Corporation Company.

W. H. FRAZIER, paper, Albany, New York. Capital $25,000. Incorporators, W. H. and W. P. and A. Frazier. Attorney, C. A. Blauvelt, Albany.

SAFETY PAPER CORPORATION, Manhattan, New York. 1,000 shares common stock, no par value. Incorporators, G. V. Lamonte, W. B. Roulstone, M. L. Haggerty. Attorney, F. J. Knorr, of Albany.

MAISEL & NUSSDORF, Manhattan, New York. Make paper. Capital $20,000. Incorporators, J. Maisel, B. Z. Nussdorf, H. J. Manheim. Attorney, M. S. Wachtell, 1328 Broadway, New York.

PHILADELPHIA TRADE SLOWER

(*Continued from page* 34)

in this social gathering and in the everyday business contact with the employment forces.

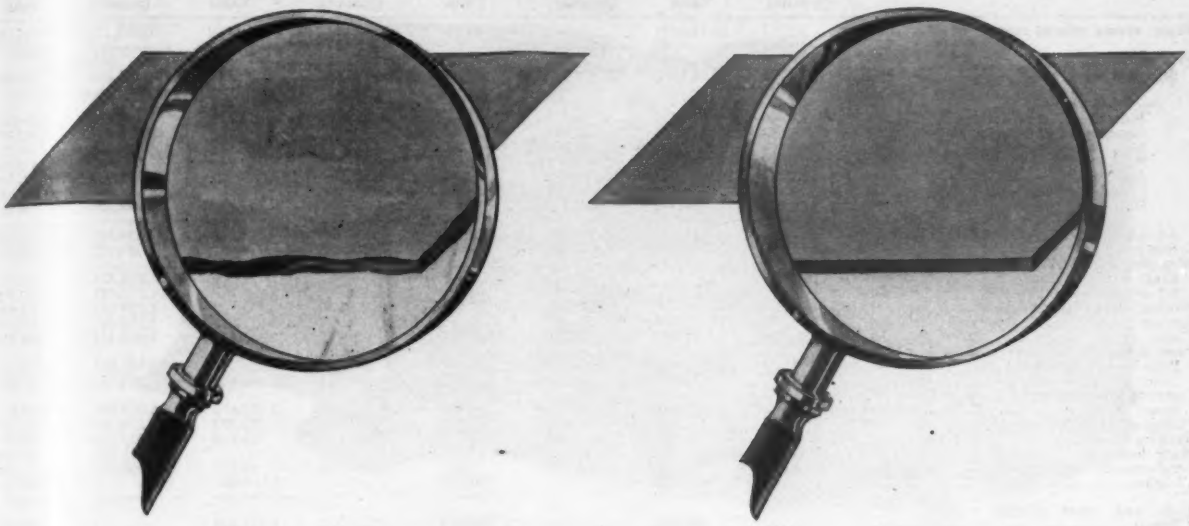
Fire Damages Dee Paper Company

Fire of unknown origin resulted in the damage of a large quantity of paper stock in the warehouses of the Dee Paper Company. The flames rapidly spreading over the first floor of the building burned through to the upper floors and were aggravated by the explosion of a varnish vat in the front of the paper house which shattered the entire front of the sales rooms and cleared the way for headway of the fire. Damage is estimated at several thousand dollars.

Paper Men Unite with Advertising Club

Paper distributors catering to the direct by mail advertising trade will be included among the membership of the newly formed division of the Poor Richard Club, composed of printers, publishers and paper dealers. The new division which will be known as the Direct By Mail Advertising, was introduced at the meeting of the Poor Richard Club held last Thursday upon the suggestion of E. S. Paret of the Biddle-Paret Press, who will head the committee appointed to organize the division with Harry Bell of the Holmes Press and Charles H. Paist, Jr., of the Paist Addressing Company as helpers. One of the active movers in the organization of the division, who will be prominent in the paper men's association with the new section, is Vice-President Norbert A. Considine, of the Poor Richard Club, and president of the Paper House of Pennsylvania, who attended the meeting.

UNDER A MAGNIFYING GLASS



How Does Your Paper Look?

WOULD it show the uneven caliper like the illustration at the left, or would it have the even appearance of the illustration at the right?

The great importance of even caliper cannot be over-emphasized. The printing quality of paper should be the first consideration of the manufacturer. Printers are now demanding stock of uniform thickness. It is necessary if they are to get best results at reasonable costs.

Perhaps you are making a sheet of fairly even caliper with the aid of aprons and slices. It would be much easier for you to be able, with a few adjustments, to produce a sheet of even caliper across the entire width of the machine, without the use of any aprons and slices whatsoever.

This can be done if you install a Voith High Pressure Stock Inlet. Minute adjustments on this remarkable piece of equipment can be readily and quickly made and uneven paper is impossible.

VALLEY IRON WORKS CO.

APPLETON, WISCONSIN

New York Office: 350 Madison Avenue

A Wisconsin manufacturer reports that he eliminated 75% of his caliper difficulties the day he commenced operating his fourdrinier machine with a Voith Inlet attached. An attractive booklet is ready for you giving particulars regarding many such experiences, together with a full description of the new stock inlet. Write for your copy today.

PAPER AND PAPER STOCKS IMPORTS AND EXPORTS OF THE UNITED STATES

For the Month Ending August 31, 1924, and for the Eight Months Ended August 31, 1924, as Compared with Corresponding Months of Previous Year

IMPORTS—PAPER.

Paper and Manufactures of	August 1923 Quantity	August 1923 Value	August 1924 Quantity	August 1924 Value	Eight Months Ending August 31 1923 Quantity	Eight Months Ending August 31 1923 Value	Eight Months Ending August 31 1924 Quantity	Eight Months Ending August 31 1924 Value
Paper, except printed matter (total)	.....	10,140,431	.....	9,241,976	.....	76,410,912	.....	78,685,226
Printing paper—								
Standard news print lbs. Free	231,818,743	8,545,200	220,456,228	8,043,469	1,720,837,490	64,209,410	1,794,161,268	67,527,937
Imported from—								
Finland lbs.	6,652,140	220,179	4,559,770	149,052	62,353,533	2,053,474	51,427,778	1,604,026
Germany lbs.	9,158,852	297,327	6,334,070	189,615	67,403,605	2,210,359	63,930,911	1,943,397
Netherlands lbs.	.....	.....	227,374	6,023	3,793,555	132,973	1,575,128	49,226
Norway lbs.	6,161,657	205,228	3,629,802	118,859	49,447,991	1,709,245	15,057,247	499,954
Sweden lbs.	4,266,236	124,843	13,692,397	305,788	76,692,900	2,447,427	72,887,932	2,295,034
Canada lbs.	204,713,191	7,668,358	191,660,316	7,174,296	1,452,708,160	55,363,908	1,586,338,151	61,047,638
Other countries lbs.	866,667	29,265	352,499	9,836	8,437,846	292,024	2,944,121	88,662
All other, n. e. s. lbs. dut.	1,262,569	71,218	1,788,304	79,999	10,407,541	531,274	17,636,132	731,908
Grease-proof and water-proof papers lbs. dut.	152,458	16,735	113,179	13,769	1,911,456	178,956	1,089,427	118,119
Wrapping paper lbs. dut.	7,952,650	331,151	.....	.....	60,402,446	2,695,474	.....	.....
Kraft wrapping paper lbs. dut.	.....	.....	1,904,333	75,845	.....	.....	21,258,024	816,751
All other wrapping paper lbs. dut.	.....	.....	1,562,658	64,256	.....	.....	16,702,029	642,602
Writing, drawing, bond, etc. lbs. dut.	160,811	48,164	327,608	72,669	2,339,230	458,097	1,709,554	373,088
Surface coated lbs. dut.	99,676	25,258	121,380	28,436	734,228	215,217	1,196,024	277,145
Tissue paper lbs. dut.	160,726	64,529	203,352	75,861	1,310,442	643,530	1,486,155	627,536
Paper boards—								
Pulp boards in rolls lbs. dut.	8,964,138	261,317	4,177,091	114,840	57,332,752	1,624,109	54,451,801	1,517,336
Other paper boards, n. e. s. lbs. dut.	2,513,252	73,016	1,456,254	31,213	17,135,314	487,681	26,075,953	492,580
Cigarette paper, cigarette books and covers lbs. dut.	830,468	220,729	654,729	173,546	8,268,351	2,182,675	6,822,705	1,802,309
Photographic paper lbs. dut.	197,948	48,055	290,077	57,029	1,279,913	272,371	2,230,564	452,107
Hanging paper lbs. dut.	683,889	30,531	425,393	18,390	5,526,246	331,160	8,023,226	392,587
Paper boxes lbs. dut.	.....	.....	139,736	85,472	.....	.....	1,103,724	672,746
Decalcomania, not printed lbs. free	14,265	3,875	6,002	1,083	256,765	66,865	308,578	74,359
All other dut.	.....	400,653	.....	306,099	.....	2,514,093	.....	2,166,116
Books and other printed matter (total)	.....	846,412	.....	785,673	.....	5,726,425	.....	5,980,675
Books and pamphlets in foreign languages lbs. free	162,458	88,484	198,624	107,307	973,952	664,791	1,508,268	890,655
Books, maps, music, etc., 20 years old lbs. free	24,756	210,736	40,078	166,960	236,770	1,080,088	251,279	994,123
Other books, etc. lbs. free	209,523	114,082	150,498	117,738	1,583,295	1,155,097	1,547,033	1,058,732
Books, pamphlets, and music, n. e. s. lbs. dut.	326,043	220,949	240,025	176,339	1,870,754	1,525,263	2,180,846	1,502,502
Maps, charts and other printed matter, n. e. s. dut.	.....	57,099	.....	62,865	.....	434,164	.....	538,301
Lithographically printed matter, n. e. s.								
Cigar bands, labels and flaps lbs. dut.	19,605	20,607	6,128	9,798	186,885	140,417	78,622	97,872
Decalcomanias lbs. dut.	18,547	25,498	21,037	25,931	106,818	157,152	172,580	240,204
All other dut.	.....	108,957	.....	118,735	.....	569,453	.....	658,286

CRUDE PAPER STOCK.

Rags for paper stock lbs. free	30,841,949	523,172	37,402,900	818,328	256,852,741	4,666,028	304,028,529	6,475,170
Waste, bagging, waste paper, etc. lbs. free	6,123,743	73,639	10,015,988	111,020	92,984,059	1,312,406	68,108,137	788,000
Old rope and all other paper stock lbs. free	6,923,371	268,714	7,583,405	349,727	73,174,550	3,285,948	65,877,982	3,523,755

WOOD PULP.

Mechanically ground tons. free	22,460	761,108	18,932	664,009	162,243	5,556,991	124,032	4,205,679
Chemical wood pulp—								
Sulphite, unbleached tons. free	47,358	2,894,256	48,703	2,536,330	308,698	17,239,383	333,594	17,981,787
Sulphite, bleached tons. free	16,708	1,522,229	26,533	1,893,635	170,705	15,281,600	169,757	13,245,671
Total sulphite tons	64,066	4,416,485	75,236	4,429,965	479,403	32,520,983	503,351	31,227,458
Imported from—								
Finland tons	5,239	309,124	3,401	168,694	51,797	2,900,996	37,707	1,970,646
Norway tons	4,562	342,912	1,975	148,259	46,953	3,680,776	29,549	2,172,481
Sweden tons	25,269	1,604,445	34,361	1,858,207	135,819	8,260,385	172,423	9,871,014
Canada tons	25,075	1,873,860	24,213	1,615,622	201,421	14,687,189	210,147	14,004,370
Other countries tons	3,921	286,144	11,286	639,183	43,413	2,991,727	53,525	3,208,947
Sulphate pulp, unbleached (kraft pulp) tons. free	25,194	1,659,281	28,375	1,598,086	151,261	9,855,427	171,206	9,932,157
Imported from—								
Finland tons	777	49,330	1,083	52,586	12,222	704,245	9,374	451,208
Norway tons	325	20,188	504	30,909	5,325	296,277	7,722	378,705
Sweden tons	11,743	742,813	16,780	882,621	45,416	2,723,497	67,144	3,598,629
Canada tons	11,639	799,702	9,613	606,532	87,017	6,039,087	84,828	5,391,184
Other countries tons	710	47,248	395	25,438	1,281	92,321	2,138	112,431
Sulphate pulp, bleached tons. free	51	4,420	4,260	223,556	12,220	848,901	10,737	599,660
Other pulp tons. free	695	34,846	99	2,508	3,347	210,202	1,388	77,655

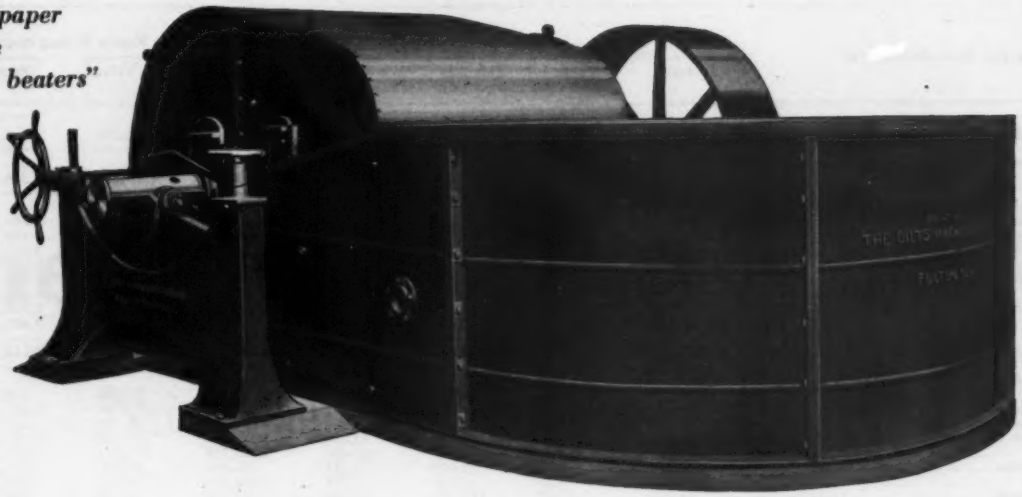
CHEMICALS AND OTHER PAPER MAKERS' MATERIALS.

Colors, dyes, stains, color acids, and color bases, n. e. s. lbs. dut.	279,708	319,648	106,063	155,505	2,236,382	2,950,825	1,960,741	2,386,198
Imported from—								
France lbs.	11,747	15,564	1,582	3,960	100,087	159,092	81,223	117,393
Germany lbs.	177,761	189,772	57,366	74,054	1,093,728	1,276,633	950,689	1,075,449
Italy lbs.	15,234	24,023	3,113	5,832	279,666	399,199	105,788	142,678
Switzerland lbs.	68,431	82,495	35,801	58,690	609,741	930,013	619,010	807,675
United Kingdom lbs.	4,473	5,152	2,241	3,005	68,625	66,936	54,746	51,882
Other countries lbs.	2,062	2,642	5,960	9,964	84,535	118,952	149,285	191,121
Casein or lactarene lbs. dut.	792,909	128,471	1,343,695	91,654	21,912,036	3,794,465	12,874,602	1,035,303
Kaolin, china, and paper clay tons. dut.	14,393	169,506	24,096	256,513	195,876	2,185,679	216,481	2,229,686

(*Continued on page* 40)

Dilts-

"Your paper is made in the beaters"



Dilts Beating Engines have earned their success

DILTS Beating Engines first won their spurs in Board and Roofing Felt Mills. New standards of beating efficiency were established. They proved their superiority under the gruelling strain of coarse mill conditions.

The same characteristics of sturdiness, large capacity, rapid circulation, tempered fly bars that could not be battered nor burred and almost perfect roll action were found to be equally successful in other types of mills.

Today Dilts Beating Engines are installed in tissue, book, kraft, glassine, news and rope as well as board and roofing felt mills. They are recognized as the highest expression of beating efficiency.

Dilts 7011

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EXPORT OFFICE ~15 PARK ROW~ NEW YORK CITY

PAPER AND PAPER STOCKS IMPORTS AND EXPORTS OF THE UNITED STATES

(*Continued from page 38*)

EXPORTS—PAPER.

Paper and Manufactures of	August 1923 Quantity	August 1923 Value	August 1924 Quantity	August 1924 Value	Eight Months Ending August 31 1923 Quantity	Eight Months Ending August 31 1923 Value	Eight Months Ending August 31 1924 Quantity	Eight Months Ending August 31 1924 Value
Paper, except printed matter (total)	.....	2,173,646	.....	2,182,882	.....	17,431,196	.....	16,395,974
Printing Paper—								
News Print Paper.....lbs.	1,998,946	109,275	2,949,952	154,487	21,675,670	1,107,854	23,554,558	1,209,948
Exported to—								
Canada	19,312	2,584	13,083	1,085	719,830	67,296	749,181	59,124
Central America	74,474	3,839	80,127	4,529	927,371	47,914	499,828	27,811
Mexico	32,977	2,072	258,211	14,834	825,149	59,676	1,641,770	84,278
Cuba	1,419,419	77,501	1,427,891	63,439	13,743,016	637,926	13,371,292	605,689
South America	57,437	2,708	170,537	8,367	1,264,946	66,345	1,534,313	87,726
Japan	101,265	6,540	3,425	482	584,433	38,882	530,277	36,013
Philippine Islands	256,288	11,782	449,992	20,059	3,007,668	147,925	2,764,193	135,763
Other countries	37,774	2,249	546,686	41,692	503,257	41,890	2,463,704	173,554
Book paper, not coated.....lbs.	2,248,910	252,826	1,792,852	203,409	19,278,711	2,143,324	10,712,816	1,269,126
Exported to—								
United Kingdom	41,718	10,545	89,531	14,070	400,886	89,980	679,326	133,367
Canada	121,083	13,994	136,849	16,514	1,594,152	205,588	1,231,614	158,139
Central America	105,766	10,781	47,346	5,356	625,449	70,142	381,963	41,608
Mexico	100,986	13,618	83,279	12,058	1,488,963	166,502	1,032,702	115,030
Cuba	394,087	44,493	579,952	59,482	5,356,956	572,271	2,339,229	263,670
Argentina	124,611	11,859	89,952	7,641	761,761	99,502	531,590	49,126
Brazil	78,811	9,432	6,056	664	660,519	70,407	193,171	26,967
Venezuela	34,236	3,217	112,382	11,950	222,409	33,151	394,431	43,187
Other South America	117,033	12,915	105,071	10,691	1,218,349	129,607	624,538	75,604
British India	21,143	2,443	4,433	501	197,577	22,484	59,405	7,910
China	419,220	42,848	306,274	37,970	1,592,275	171,849	1,005,897	105,593
Japan	44,156	3,721	45,096	4,683	1,602,060	141,114	374,438	45,575
Philippine Islands	482,379	49,903	69,380	6,616	2,368,197	223,584	778,504	70,199
Australia	69,220	8,802	22,127	2,275	616,483	71,403	352,336	39,818
Other countries	94,461	14,255	90,124	12,938	572,675	75,740	733,672	93,343
Cover paper.....lbs.	102,248	18,272	69,184	10,086	792,352	141,548	512,373	92,306
Greaseproof and waterproof paper.....lbs.	127,421	17,727	183,288	17,274	1,103,542	144,267	1,186,324	134,002
Wrapping paper—								
Kraft paper.....lbs.	101,049	9,650	27,574	3,208	522,560	45,894	394,206	45,814
Other wrapping.....lbs.	1,930,235	168,918	2,134,592	153,337	17,794,444	1,428,739	15,818,142	1,309,903
Writing paper, except papeteries.....lbs.	513,586	89,530	411,135	58,437	4,318,505	691,416	3,195,572	498,871
Surface-coated paper.....lbs.	411,029	63,763	383,812	43,669	2,926,438	449,485	2,257,929	349,077
Tissue and crêpe paper.....lbs.	255,188	75,275	344,670	86,401	2,104,129	518,438	1,895,378	483,860
Toilet paper.....lbs.	642,919	63,316	285,569	34,277	3,559,753	419,440	2,805,461	326,296
Paper towels and napkins.....lbs.	98,622	18,788	178,381	27,350	785,878	125,183	973,613	150,797
Bristols and bristol board.....lbs.	346,118	17,624	39,857	6,612	1,455,881	119,875	653,701	83,843
Paper board and straw board.....lbs.	6,416,992	284,349	7,774,781	276,548	38,077,745	1,848,985	51,362,352	2,049,509
Sheathing and building paper.....lbs.	208,493	10,361	747,856	30,674	2,363,822	111,043	3,297,392	153,192
Wall board of paper or pulp.....sq. ft.	1,641,564	54,567	1,577,204	59,357	9,773,512	361,458	12,142,162	406,276
Blotting paper.....lbs.	.....	.....	249,486	29,904	.....	.....	1,606,526	200,073
Filing folders, index cards and other office forms.....lbs.	.....	.....	33,208	11,708	.....	.....	302,991	110,336
Cigarette paper and books.....lbs.	50,923	10,331	42,554	11,857	310,620	94,541	653,893	234,667
Photographic paper.....lbs.	134,374	105,192	173,077	178,193	955,304	979,817	1,099,849	1,149,866
Paper hangings (wall paper).....yard	1,289,712	38,301	1,016,695	29,606	15,159,790	398,821	16,902,973	442,107
Paper bags.....lbs.	638,289	66,772	868,268	75,842	6,078,061	577,599	6,845,210	656,191
Boxes and cartons.....lbs.	839,759	85,728	1,103,652	94,339	7,262,345	680,313	8,818,498	731,965
Carbon paper.....lbs.	65,543	51,060	85,180	68,007	581,729	458,375	604,424	473,611
Envelopes.....lbs.	192,068	42,689	231,349	43,339	1,840,283	357,003	1,597,262	320,967
Playing cards.....pack	600,956	86,484	514,171	52,630	7,164,215	858,409	4,168,035	468,773
Cash register and adding machine paper.lbs.	123,446	12,851	71,026	8,422	764,364	81,556	765,602	87,366
Papeteries (writing paper in boxes).....lbs.	63,563	32,544	74,189	25,415	291,965	110,126	246,970	93,654
Other paper and paper products, n.e.s..lbs.	1,837,949	390,453	3,633,473	388,494	23,629,516	3,177,687	25,059,196	2,863,578
Books, maps, pictures, and other printed matter (total).....lbs.	4,512,909	1,543,387	5,421,767	1,900,821	31,372,239	11,180,245	35,676,118	12,579,721
Books and pamphlets.....lbs.	2,342,900	781,949	3,151,112	918,557	16,465,972	5,464,641	21,504,668	6,310,089
Maps and charts.....lbs.	12,710	12,607	7,529	7,253	131,641	110,646	102,114	104,142
Music in books or sheets.....lbs.	59,940	37,076	89,182	52,098	363,820	233,521	429,639	257,598
Souvenir post cards.....lbs.	132,356	29,561	53,599	29,334	403,241	123,477	248,464	120,351
Lithographically printed matter, except post cards and maps.....lbs.	246,893	150,972	255,149	226,506	1,332,306	994,952	1,465,869	1,256,080
Other printed matter.....lbs.	1,718,110	531,222	1,865,196	667,073	12,675,259	4,253,008	11,925,364	4,531,461

WOOD PULP AND PAPER STOCK.

Sulphite wood pulp.....tons	1,115	64,027	1,782	105,543	9,428	550,637	12,889	771,372
Soda wood pulp.....tons	216	20,538	.....	.....	2,604	249,712	1,082	100,951
Other wood pulp.....tons	301	21,286	425	26,920	1,236	73,258	3,095	290,059
Rags, and other paper stock.....lbs.	13,448,020	219,520	11,890,428	189,485	69,597,350	1,244,947	86,272,661	1,441,838

PAPER AND PULP MILL MACHINERY.

Paper and pulp mill machinery.....lbs.	836,073	135,172	1,011,278	162,133	9,473,250	1,531,638	7,482,992	1,542,225

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Editorial

Vol. LXXIX New York, October 16, 1924 No. 16
HENRY J. BERGER, Editor

FOREIGN PAPER SALES

The exports of paper showed a considerable increase for August according to statistics which have just been furnished by the Department of Commerce at Washington, D. C. and which are the latest figures available. The exports of all varieties of paper for August amounted to $2,182,882 as compared with $1,818,883 for July and $2,173,646 for August of last year. The exports of all varieties of paper for the eight months ending with August amounted to $16,395,974 as compared with $17,431,196 for the same period last year.

The exports of news print shared well in the general increase, the figures for August being $154,487 as compared with $102,059 for July and $109,275 for August of last year. The exports of news print for the eight months ending with August were valued at $1,209,948 as compared with $1,107,854 for the same period last year.

The exports of book paper, not coated, also showed a good increase, the figures for August being $203,409 as compared with $155,817 for July and $252,826 for August of last year. The exports of book paper, not coated, for the eight months ending with August were valued at $1,269,126 as compared with $2,143,324 for the same period last year.

The exports of wrapping paper, including Kraft for August were valued at $156,545 as compared with $135,599 for July and $178,468 for August of last year. The exports of wrapping paper, including Kraft, for the eight months ending with August were valued at $1,355,717 as compared with $1,474,633 for the same period last year.

The exports of paper board and straw board for August were valued at $276,548 as compared with $257,941 for July and $284,349 for August of last year. The exports of paper board and straw board for the eight months ending with August were valued at $2,049,509 as compared with $1,848,985 for the same period last year.

The exports of writing paper, except papeteries, for August amounted to $58,437 as compared with $40,580 for July and $89,530 for August of last year. The exports of writing paper, except papeteries, for the eight months ending with August were valued at $498,871 as compared with $691,416 for the same period in 1923.

The exports of tissue and crepe paper for August were valued at $86,401 as compared with $60,892 for July and $75,275 for August of last year. The exports of tissue and crepe paper for the eight months ending with August were valued at $483,860 as compared with $518,438 for the corresponding period last year.

The imports of paper for August as compared with July showed a falling off of about half a million dollars, the figures for the former month being $9,241,976 and for the latter $9,662,193. The figures for August a year ago were $10,140,431. The imports of paper for the eight months ending with August were $78,685,226 as compared with $76,410,912 for the corresponding period last year.

The imports of news print for August were valued at $8,043,469 as compared with $8,386,517 for July and $8,545,200 for August of last year. The imports of news print for the eight months ending with August were valued at $67,527,226 as compared with $64,209,410 for the corresponding period last year.

The imports of wrapping paper, including kraft, for August were valued at $139,901 as compared with $176,662 for July. The imports of wrapping paper, including kraft for the eight months ending with August amounted to $1,459,353.

The imports of rags for paper stock for August were valued at $818,328 as compared with $775,973 for July, and $523,172 for August of last year. The imports of rags for paper stock for the eight months ending with August amounted to $6,474,170 as compared with $4,666,028 for the same period in 1923.

The imports of waste bagging, waste paper, etc., for August amounted to $111,620 as compared with $82,531 for July and $73,639 for August of last year. The imports of waste bagging, waste paper, etc., for the eight months ending with August were valued at $788,000 as compared with $1,312,406 for the same period last year.

The imports of old rope and all other paper stock for August amounted to $349,727 as compared with $434,372 for July and $268,714 for August of last year. The imports of old rope and all other paper stock for the eight months ending with August were valued at $3,523,755 as compared with $3,285,948 for the same period last year.

The imports of groundwood for August amounted to $664,009 as compared with $530,895 for July and $761,108 for August of the preceding year. The imports of groundwood for the eight months ending with August were valued at $4,205,679 as compared with $5,556,991 for the eight months ending with August of last year.

The imports of unbleached sulphite pulp for August were valued at $2,536,330 as compared with $2,666,124 for July and $2,894,256 for August a year ago. The imports of unbleached sulphite pulp for the eight months ending with August amounted to $17,981,787 as compared with $17,239,383 for the corresponding period last year.

The imports of bleached sulphite pulp for August were valued at $1,893,635 as compared with $1,573,977 for July and $1,522,229 for August of last year. The imports of bleached sulphite pulp for the eight months ending with August were valued at $13,245,671 as compared with $15,281,600 for the corresponding period last year.

The imports of unbleached sulphate pulp for August were valued at $1,598,086 as compared with $228,293 for July and $1,659,281 for August of last year. The imports of unbleached sulphate pulp for the eight months ending with August were valued at $9,932,157 as compared with $9,855,427 for the corresponding period last year.

UNIFORM COST ACCOUNTING

Representatives of more than 300 trade associations have been invited to attend a conference on uniform cost accounting to be held at Congress Hotel, Chicago, October 28 and 29. The meeting will be the third of a series held under the auspices of the Department of Manufacture of the Chamber of Commerce of the United States for the purpose of furthering interest in systematic cost accounting work.

The preliminary program for the Chicago conference lists two subjects for consideration on the opening day. One of these is "The Bankers' Interest in Uniform Cost Accounting," to be discussed by J. W. O'Leary, vice-president of the Chicago Trust Company, and the other "The Printer, Uniform Cost Accounting, and the Federal

Trade Commission." The latter subject will be discussed by two speakers who will go into the question of the Federal Trade Commission's attitude toward uniform cost accounting activities.

In announcing the preliminary plans for the meeting, E. W. McCullough, manager of the Chamber's Department of Manufacture, makes the point that the adoption of uniform cost accounting by an industry does not mean the destruction of individual systems now in use but only adjusting them in harmony with uniform methods. "Few individual systems" he says, "attain the accuracy and facility of operation found in uniform systems built by the members of an industry who, after careful study, have combined the best found in individual practice, adding to it by way of improvement and advance in technique found in other lines. The advantage of the same practical revision of a uniform system from time to time should not be overlooked.

"In lines using gross price lists and selling by discount we find a tendency to minimize the need of cost accounting and continuing the use of rule of thumb methods in fluctuating discounts. Some of these lists are more than fifty years old. A gross price list is perhaps a necessary vehicle of convenience in quoting prices on lines composed of many small units, but in determining a proper discount to apply to it to bring a fair profit return, accurate costs must be had. Several such lines are now showing keen interest and are ready to organize for systematic cost work."

Kraft Paper Manufacture in the South

ALEXANDRIA, La., October 11, 1924.

Editor, PAPER TRADE JOURNAL

In your issue of September 25 you made reference to a visit of the Industrial Committee in the city of Monroe, La., inspecting Brown Paper Company Mill.

Kraft paper development in the South was first established in 1904, and then in an experimental way, since that time there has been a material expansion of this industry in the state of Louisiana. The paper industries need not be alarmed at any over production of kraft paper by the Southern States, where it is true the South has very material advantages in the extreme economy of manufacturing of kraft paper, it does not necessarily follow that the entire area can manufacture paper.

As we view it there are four assets, the first is a plenteous supply of cheap fuel raw material, and its rapid reproduction, pure water and available dependable supply of intelligent labor. In going over this state, I can find only a few points that would supply all of these advantages.

The town of Bastrop has one mill in operation, and one under construction, these two mills are sufficient for the available supply of raw material. The city of Monroe has one large factory, which will take care of the raw supply for a radius of twenty-five miles. They have acquired something like 30,000 acres of land, and will begin reforestation at once. The city of Bogalusa has a large paper mill and bag factory, and already has made large strides in reforestation, receipting and planting on an average of 5,000 acres per year. The next point that has superior advantages is Alexandria, located in the geographical center of the state, the seven trunk lines railroads, water transportation, natural gas for fuel, excellent water, and an ample supply for a large pulp and paper mill for twenty-five years to come, and large areas of young pine that will be available for this mill, ranging from ten, fifteen, and twenty years. This young forest will not have to be disturbed for at least twenty years.

The Chamber of Commerce of this city is largely interested in the development of this industry at this point.

The organization of a company is now being undertaken by R. W. Fannor a paper engineer of Green Bay, Wis., and is being assisted in this organization by W. A. Fannon of Appleton, Wis., and Col. William Polk of this city.

The paper trade must recognize the great opportunities that are open for this industry, for it is the opinion that the various quality and kinds of woods produced in this section will enable the constant research of well established laboratories perfecting the process by which all grades of paper may be manufactured in the Southern States. I do not presume any state in the Union has so large a variety of timber as is now grown in the Southern States bordering the Gulf of Mexico. Those industries so established should immediately begin the proper and ordinary investigation of available points for the transfer of their operation.

The great strides made by the State of Lousiana in developing those splendid hard surface highways makes the delivery of the raw product to the mill most economical, and the mill in the South does not require more than thirty days supply of raw material during any season of the year.

From the constant agitation of an export tax on raw products by the Canadian Government, in order to preserve their own forest and to encourage the establishment of factories in their domain, it appears to the writer that under these conditions if those factories, who are depending upon this supply would seriously investigate Southern opportunities, and take advantage of suitable points where they are available.

The paper world will be benefited by the distribution of the manufacturing interest throughout the country and eliminate its conjestion in the Eastern and Northwestern points, if it would further reforest in the Southwestern States and offer such remarkable opportunities for the quick growth of pulp stock. This phase of the paper industry is one of very serious moment.

This communication is merely for the purpose of calling to the attention of the paper world advantages that are open to this industry, that they may be properly investigated.

Yours very truly,

WM. POLK.

Blake, McFall Co. Buys Endicott Paper Co.

From the Northwest comes the news that on or about October 15 Blake, McFall Company, of Portland, Ore., will take over the business of the Endicott Paper Company, of the same city. The Endicott Paper Company has been identified with the Butler chain of houses, and for some years has been doing business in the Portland territory in both fine and coarse papers. The Blake, McFall Company will take over the Endicott Company's complete stocks of merchandise and the company will retire from business.

As a part of this transfer, at the same time, the Mutual Paper Company, of Seattle, Washington, will take over the stocks of the American Paper Company, also of Seattle, and will move into their quarters at Atlantic and Utah streets. The officers of the Mutual Paper Company are announced as Ralph H. Miller, president; J. L. Murray, vice president and manager; E. H. Pope, secretary and treasurer; J. W. Thompson, assistant manager, and Lewis C. Connor, assistant manager and sales manager. A. B. Galloway, manager of the American Paper Company, will leave Seattle as soon as his affairs will permit, probably early next year, according to the announcement. He plans a tour of the Orient where he has interests.

The Blake, McFall Company, one of the pioneer paper firms in the Northwest, is affiliated with the Blake, Moffitt & Towne chain, and does a large business in fine and coarse papers, stationery, twines and cordage throughout the state of Oregon. The Blake, McFall Company has announced no changes in its organization nor in its lines of merchandise as a result of taking over the Endicott Paper Company, but after closing out the Endicott stocks, will continue as before.

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Section of the
Technical Association of the Pulp and Paper Industry

AN ORGANIZATION FOR THE ENCOURAGEMENT OF ORIGINAL INVESTIGATION AND RESEARCH WORK IN MILL ENGINEERING AND THE CHEMISTRY OF PAPER, CELLULOSE AND PAPER-MAKING FIBERS GENERALLY; IT AIMS TO PROVIDE MEANS FOR THE INTERCHANGE OF IDEAS AMONG ITS MEMBERS IN ORDER THAT PROCESSES OF MANUFACTURE MAY BE MADE MORE EFFICIENT AND IMPROVED ALONG TECHNICAL LINES.

Conducted by W.G. MacNAUGHTON, Secretary

ECONOMIC FACTORS IN THE PULPING OF WOOD WASTES

By J. D. Rue, U. S. Forest Products Laboratory

The reason why such raw materials as sawmill waste, waste of secondary wood-using plants, extracted pine chips, etc., are not now more extensively used as a source of paper pulp may be found in large measure in the high cost involved in bringing the wastes to the mill or in carrying the products to the markets. If the raw material is fairly well localized but far removed from the market, the problem of an economic location for the pulp mill becomes difficult; if the material is found at plants widely scattered over the country, no one of which produces it in amounts sufficiently large to support a pulp mill unit, the cost of collecting an adequate supply from several sources becomes prohibitive very quickly.

To promote more intensive utilization, economic conditions must change—either slowly by force of natural circumstances or more rapidly through intelligent guidance. In view of the importance which utilization is assuming in the formation of our national forest policy, a brief discussion of these forest problems as they bear upon the pulp and paper industry will not be amiss.

Pulpwood Locations

Spruce, fir and hemlock, the principal pulpwood species, are located in general in three regions—the Northeast, the Rocky Mountain region, and the Pacific Coast states. Paper markets are found chiefly in the Northeast. The result is northeasteern pulpwoods suffering rapid depletion, the Rocky Mountain supply practically untouched, and the Pacific Coast supply developed for local and export demand only. The Northeast consumed, in 1922, 81 per cent, and the Pacific Coast only 7 per cent of the total pulpwood consumed in the United States.

The average consumption and costs of pulpwood for the years 1909, 1917, and 1922 for the two regions were, in round numbers, as follows:

	Northeast		Pacific Coast	
Year	Cords	Cost Per Cord F.o.b. Mill	Cords	Cost Per Cord F.o.b. Mill
1909	3,344,000	$8.95	156,000	$7.55
1917	4,562,000	11.70	262,000	6.45
1922	4,438,000	17.55	346,000	10.20

Mills in the Northeast have been compelled to go farther and farther away for their wood supply, and have had to stand a higher and higher transportation cost. Cases are not infrequent where the freight bill on pulpwood equals the cost of the wood at the shipping point. Transportation costs are among the dominant factors limiting the development of the pulp and paper industry in the Rocky Mountain and Pacific Coast regions. If the differential in pulpwood costs becomes sufficiently great to take care of transportation costs on the finished product, due allowance being made for any small differences in cost of manufacture, the eastern market will lie open to the western manufacturer. Such a situation would necessarily be hastened or retarded by any downward or upward adjustment in transcontinental freight rates on paper.

Pulpwood in West Coast Region

The pulpwood species in the West Coast region are found in mixed stands containing vast quantities of Douglas fir of use principally as saw timber. In the logging operations for the latter the pulpwood species, except for their limited sawmill value, constitute at present merey a waste and a nuisance. More extended use of the pulpwood would therefore be a matter of major interest to the owner of saw timber limits. The development of these western regions as pulp and paper centers must involve the common interest of timber owners, pulpwood manufacturers, and transportation companies.

In the South

In the South are large quantities of pine stumps and "lightwood" which possess at least potential value as sources of both naval stores and pulp. At the present time a limited amount is being worked up for naval stores, the chips being used for fuel. In view of the inevitable shortage in pulpwood which is coming, serious consideration should be given to the possible use of the extracted chips for pulp. Under favorable conditions the manufacture of pulp from the chips should yield a profit and at the same time place the extraction industry on a firmer financial basis. Aside from minor compromises which can readily be made as necessary in the processes involved, the cost of transporting the chips from the extraction plant to the pulp mill is perhaps the dominant factor. This cost might be avoided by the location of the pulp mill in connection with the extraction plant, but in either case there are involved the transportation costs of either the raw matereial or of the finished product. What has been said of the use of extracted pine chips applies with equal force to the possible use of mill waste for pulp.

Editor's Note: The National Conference on Utilization of Forest Products to be held in Washington, November 19 and 20 is evidence of the growing realization on the part of the industry that the economic realization of our forest resources involves a community of interest among many related industries, demanding concerted action; and that such utilization is not inconsistent with profit for the operator, distributor, and consumer.

Specifications of Permanent Record Printing Paper*

We have been interested in obtaining paper for book printing which would be permanent in its character and for this we have hitherto resorted to 100 per cent rag paper. We understand that less expensive sheets have been found to be permanent and would appreciate such data as are available on this point.

There is no doubt that 100 per cent rag is the most durable fiber in making paper. The oldest paper document in existence is a deed of King Robert of Sicily dated from the 13th Century and made entirely of cotton rag fiber. In order of permanence the various fibers rank as follows:

1. Rag cellulose.
2. Chemical wood cellulose.
3. Rapurto straw and bamboo cellulose.
4. Mechanical wood pulp.

The United States Government Printing Office demands the following specifications for permanent record printing paper:

All rag stock preferably high quality rags, well washed, not over bleached and carefuily handled in the process of manufacture. Minimum amount of loading, not in excess of 5 per cent, and with a minimum amount of sizing materials. The paper should be free from any injurious chemicals such as acids, bleach, sulphates and the like. No specification for strength is recommended owing to the fact that high quality book papers may be made of a soft or hard texture, which would materially influence the strength, and information should be available as to the type of paper in order to include strength specification.

The British Government Stationery Office, after an exhaustive investigation by the Society of Arts, has adopted the following specifications:

For written documents of permanent value, the paper should be all rag fiber, without starch and loading, tub sized with gelatine. For printed books to be preserved as of permanent value, not less than 70 per cent of the fiber should be rag, the loading should not exceed 10 per cent, as shown in the ash of the paper, and the sizing should be effected by not more than 2 per cent of resin.

* From *Typothetæ Bulletin*, Sept. 29, 1924.

Scandinavian and American Paper Comparisons

A significant letter from a Swede, relative to American forestry and Scandinavian pulp production problems, has been received by Dr. Hugh P. Baker, Executive Secretary of the American Paper and Pulp Association.

The letter is from M. Juhlin Dannefelt, a Swedish forester who came to the United States under a fellowship from the Scandinavian-American Foundation to spend a year of study. Through Dr. Baker, American foresters have gone to Scandinavia for study as exchange fellows for a similar number of Scandinavian foresters, and Mr. Dannefelt was afforded an opportunity to visit many American paper mills. He writes:

"After my stay in America, I can easily understand those who advocate that the first thing to do, in order to improve the forestry condition in the States is the preventing and fighting of forest fires. One can not force a man to spend money in caring for the forest when the risk of getting it all burnt up is as great as it is now, in spite of the excellent work in forest fire protection that is already going on in most of the states.

"Two good things, however, which I observed nearly as often as the barren and culled over lands were your splendid, rich forest soil and the excellent possibilities for natural reproduction. We would be lucky in Sweden if it was only half as easy to get natural regrowth in our country as it seems to, in most parts of the States. High up in Canada, down in the Southern Pine districts of Louisiana, under the extremely dry conditions in Arizona, as well as in the luxuriant Pacific Coast forests, they seemed to get enough natural reproduction in most cases simply by means of leaving a few seed trees and keeping cattle and fire away. I have met some foresters in America who only advocate planting and planting again as being good forestry. I should rather consider good forestry in America as the treatment of timber so as to secure a second crop by means of natural seeding in all cases where that can be accomplished, using the risky and expensive method of planting only where natural reproduction is impossible."

Pulp and Paper Instruction at Iroquois Falls

"The weekly class held in connection with the course of study in the Manufacture of Pulp and Paper has been resumed for the coming fall and winter says the *Broke Hustler* issued by the Abitibi Power and Paper Company at Iroquois Falls, Ont.

"This course is conducted by correspondence by the Institute of Industrial and Domestic Arts of Gardenvale, P. Q., which has students in many of the Canadian pulp and paper mills. The course is based on the thorough up-to-date text books on this subject recently published by the McGraw-Hill Book Company for the Educational Committees of both the Canadian and American Pulp and Paper Associations.

"Although each individual student conducts his course by direct correspondence with the Institute, the Abitibi Company is so keenly interested in the opportunity which this course provides for men in the industry to better their positions by study that the management have reserved the Mill Class Room for the sole use of local students one evening a week, and have also made provision for personal tutorial assistance.

"Each Thursday evening from 7:30 till 10 p. m., Arthur A. Scott of the Service Division, who is also taking the course, will be found in the Class Room; and all local Institute students have this weekly opportunity to use this time and place in which to pursue their course and discuss their problems with Mr. Scott.

"Any students who have had to drop their work temporarily through conflicting interests are urged to resume the course where they left off; and any others who might consider taking the course are invited to call next Thursday to discuss it."

Thick Stock Bleaching Systems

The R. B. Wolf Company, engineers and manufacturers of 39 Cortlandt street, New York city, announces that it has entered into an arrangement whereby all of its thick stock bleaching apparatus will be manufactured for it by the Moore & White Company of Philadelphia.

The Wolf thick stock bleaching process is in operation in the following mills:—

Newton Falls Paper Company, three equipments; Fletcher Paper Company, two equipments; Northwest Paper Company, four equipments; Dill & Collins Company, one equipment; Menasha Printing and Carton Company, one equipment.

The company has installations in process of construction as follows:—

Dells Paper and Pulp Company, one equipment; Dunn Sulphite Paper Company, one equipment; Paul A. Sorg Paper Company, three equipments; Daily News Paper Corporation, four equipments; Cherry River Paper Company, one equipment.

The Wolf Company furnishes both horizontal and vertical units, the latter in either the Fletcher or Collins type.

To Improve Color of Bristols

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., October 15, 1924.—The Paper Laboratory of the Bureau of Standards is co-operating with a manufacturer of white bristols who is endeavoring to improve the color of these papers. It is believed that this work may give some interesting results in connection with the use of the Pfund colorimeter for measuring this property. Various dyes are being used in the mill and the tinting effect produced will be measured with the colorimeter.

BENTONITE FOR PITCH TROUBLE*

By Sidney D. Wells[1]

Among the most elusive difficulties met with by papermakers are those due to pitch. These troubles are varied in character and recur under widely different conditions of operation. It has been practically impossible to fix upon any single cause as being responsible. The quantity of resinous material in the wood and pulp does not appear to be necessarily an indication of the difficulty to be expected. The chemical nature of the pitch and the operating conditions seem to have greater influence in determining the recurrence of these troubles. Conditions which favor the recurrence of pitch troubles appear to be those which favor coagulation of the resinous material in the system. Making the reasonable assumption that the resins cannot practically be removed from the system, any solution to the difficulties must be found in maintaining the resins in a disseminated or finely dividend condition and in preventing their agglomeration to particles of sufficient size to stick to the screens, machine wires, suction boxes or press rolls.

Studies in Lake State Paper Mill

An opportunity was given the writer recently to study and in a measure to correct the troubles from pitch encountered in a paper mill in the Lake States. This opportunity was particularly welcome in that the troubles arose following the closing of the white water system, a fact which gave some strength to the supposition that the intensive circulation of the white water was to some extent responsible for aggravating the pitch conditions.

In this mill white water was used on all the showers except the "foam killers" over the apron and the volume of water running away from each machine was less than one-fifth of what it had been when fresh water was used. Dezurik showers were used and practically no plugging of the nozzles from the solids in the white water occurred. The limited volume of water which did not find reuse upon the machine was used in the groundwood mill. What water it was found necessary to waste from the groundwood mill was passed over sloping screen savealls for the recovery of as much fiber as possible. The grades of paper made varied from standard print to halftone. In the latter converted magazine stock and clay were used in addition to groundwood and sulphite. Trouble from pitch spots became so bad that it was necessary to shut down each machine three times a day to steam out the wires.

In an effort to locate the cause of the difficulty the alkalinity (or acidity) of the beater furnishes before and after the addition of alum and of the white water were determined. The pulps were analyzed for pitch content, the size was analyzed, and the conditions resulting from the closing of the white water system were studied.

Analyses on Some of the Pulps

In Table 1 are shown the results of the analyses made on some of the pulps. There is nothing in these results to indicate an abnormally resinous condition in the pulps. When making unsized paper no trouble was experienced, but in making sized papers the trouble appeared and became greater the greater the quantity of size used. The composition of the size was, however, quite normal and apparently was only a contributing cause to the pitch troubles insofar as it rendered the sheet less capable of absorbing the pitch as rapidly as it was introduced into the system. In short the more the situation was studied the more evident it became that the difficulties could be ascribed to no single cause but rather to a combination of circumstances aggravated by the closing up of the white water system, whereby the resinous substances coming from the wood were given an opportunity to collect and coagulate under the churning action of the centrifugal pumps and the impact of the showers on the wire.

TABLE 1

	Ether extract. Per cent	Alcohol extract after the ether extraction. Per cent
Sulphite blamed for pitch trouble	1.13	.35
Sulphite blamed for pitch trouble	1.10	.43
Sulphite believed satisfactory	1.00	.27
Ground wood ground with fresh water	.45	.67
Ground wood ground with white water	.57	.68
Ground wood ground with white water	.56	.78
Ground wood ground with white water	.88	.80
Ground wood ground with white water	.48	.82

The most obvious method for eliminating the trouble seemed to be in the use of some material, if it could be found, which would prevent the pitchy material from coagulating and maintain it in a very finely divided condition so that it would be uniformly distributed throughout the stock. The writer had already suggested a number of times the use of Bentonite for this purpose. The results which some mills have reported to have obtained by its addition to sulphite pulp have been very gratifying, but no opportunity had previously been offered for applying it to groundwood pulp.

Method of Introduction

The Bentonite was at first introduced into the system in the beaters at the rate of 10 pounds per 1000 pounds of fiber. About 10 beaters were dropped containing this proportion of Bentonite. During this period a marked reduction was experienced in the formation of pitch spots on the wire and one steaming of the wire was omitted that day. The paper that was being made on the machine was of a railroad manila shade and very susceptible to a two-side effect, especially when made on this machine, which was equipped with a suction couch roll. The addition of the Bentonite on the furnish accentuated the two-sided effect and its use in the beaters was consequently discontinued.

In order to introduce the Bentonite into the pulp before the pitch had opportunity for coagulation, and under conditions which would minimize the two-sided effect in the finished paper, it was introduced into the water used on the grinder stones. In proportions up to 5 pounds per ton of pulp it showed no noticeable effect in retarding pitch troubles. In proportions greater than 5 pounds per ton of pulp, however, a distinct improvement was observed and when 10 pounds were added it was possible to operate the paper machine one whole week with only two steamings of the wire, one in the middle and one at the end of the week. The two-sided effect in the paper was not accentuated. After two weeks of satisfactory operation the Bentonite was discontinued for a period of two days. During this period trouble from pitch spots again became as serious as before. By the end of this period the number of grinders had been increased from four to six and the equipment available for mixing the necessary amount of Bentonite was taxed to its limit. Although pitch spots were eliminated on the wires pitch continued to collect on the suction box covers so that it was necessary to scrape them off occasionally. It was impossible at that time to increase the proportion of Bentonite to a point which would eliminate these difficulties also. In a short time the number of grinders in operation was increased to from twelve to seventeen so that it was impossible to supply Bentonite in sufficient quantity to provide even the 10 pounds per ton of pulp and distribute it uniformly between all the grinders until several mechanical changes had been made. Under these conditions the trouble from pitch reappeared and it was necessary to substitute fresh water for white water on the showers. The substitution of the fresh water again eliminated the trouble which indicated that in the re-circulation of the white water there became accumulated in it sufficient dissolved material to accentuate the coagulation of the pitch.

*Presented at the Fall meeting of TAPPI, Buffalo, N. Y., Oct. 14 and 15, 1924.

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It may be concluded from these observations, therefore, that closing up a white water system by practically complete re-utilization may be attended with pitch troubles, and that to eliminate these troubles it may be necessary to introduce a small amount of fresh water with the corresponding elimination of white water from the mill. The amount of fresh water can be reduced by the use of some material in the system which will prevent the coagulation of the pitch. Bentonite in the proportions of 10 pounds per 1000 pounds of stock in the beater or 10 pounds per ton of pulp on the grinders, under the conditions obtaining in this mill, was sufficient to eliminate the difficulty when the use of fresh water was limited to the "foam killers" and the rotary screens.

CHEMISTRY OF THE SULPHITE PROCESS, VII*

Effects Producible by Variation in Pressure

By R. N. Miller[1] and W. H. Swanson[2]

In an earlier paper[3] it was shown that in a relatively fixed system such as is found in mills operating the sulphite process, the variations in product that could be produced by variations in acid concentration were small as compared to those that could be produced by variations in temperature when operating at constant pressure. The experiments recorded here were carried on to develop the variations that could be produced by pressure variations when the range of temperatures was constant. The range of pressures selected covered those in common commercial use and one, at 100 pounds, far beyond the commercial range.

Well Seasoned White Spruce

The wood was well seasoned white spruce. Eighty-five pounds of standard chips averaging approximately ⅝-inch in length were used in each cook.

The acid was prepared from high-grade calcium hydrate and from sulphur dioxide received as liquid in cylinders. In all cases the acid contained the liquid and gaseous relief from a previous cook, and the analysis was approximately 5.50 per cent total SO_2 with 1.20 per cent combined SO_2. Fifty-five gallons were used in each cook.

TABLE 1

Yields and Chemical Composition of the Pulps

Cook	Pressure. Pounds per square inch	Yield of screened pulp. Per cent	Lignin in the screened pulp. Per cent	Cellulose in the screened pulp. Per cent	Yield of cellulose from the wood. Per cent
3050	65	48.3	1.7	94.6	45.7
3051	70	48.4	2.5	96.4	46.7
3056	75	48.4	1.1	96.1	46.5
3057	80	48.2	1.2	95.9	46.2
3071	100	47.7	1.5	95.3	45.5

Charges were cooked by direct steam, with side relief up to 137 degrees C. to 138 degrees C. Top relief was then used to the finish, the last 15 minutes being employed to relieve the pressure down to about fifty pounds before blowing. The temperature was brought to 110 degrees C. in 1½ hours and a uniform rise followed to 148 degrees C. in 8½ hours.

Yields of Pulp and Cellulose

The yields of pulp and cellulose and the chemical composition of the pulps[4] are shown in Table 1. Cellulose as recorded here refers to the residue left after completion the Cross and Bevan chlorination treatment as practiced at the Forest Products Laboratory. The yield of cellulose is calculated by multiplying the percentage cellulose content of the pulps by the percentage yield of oven-dry screened pulp from the wood. It is apparent that there is no great variation in the yield either of screened pulp or of cellulose throughout the cooks. Cook No. 3071, at the extreme pressure of 100 pounds, shows only a small decrease in yield as compared with the others.

Pulps Were Strong

All the pulps were strong, as can be seen from the record of strength tests in Table 2. There were certain differences detectable by one experienced in the handling of pulps but they are not expressible in figures and are not shown by analysis or test. Judged by feel, the pulps produced at higher pressures were somewhat better cooked. In view of the limited knowledge now available no special significance can be attached to the strength results obtained in cooks Nos. 3051 and 3071 as compared with the others of the series.

TABLE 2

Strength Tests—Ball Mill Method (Numbers at Head of Columns Refer to Minutes in Ball Mill)

Cook No.	Pressure. Pounds per square inch	Bursting strength—Points per pound per ream 20	40	60	80	Breaking length—Meters 20	40	60	80
3050	65	0.75	0.92	1.05	1.00	3965	4714	4236	3835
3051	70	0.60	0.82	0.90	0.87	2417	3271	3343	3398
3056	75	0.70	0.98	1.06	1.10	3674	3917	4254	4420
3057	80	0.71	0.94	1.05	1.04	3966	4459	3961	4069
3071	100	0.54	0.83	0.95	0.83	2310	2799	3465	2913

The extent to which variations in pressure influenced the concentration of the active sulphurous acid can be seen from Table 3. At 140 degrees C., the lowest temperature at which all cooks were on dry gas and at equilibrium at the maximum pressure, the difference in concentration between the acid in cook No. 3050, at 65 pounds pressure, and in cook No. 3071, at 100 pounds pressure, is only 0.67 per cent active sulphur dioxide as sulphurous acid. The difference increases to 0.92 per cent at 145 degrees C. and represents nearly the maximum obtainable by the difference in pressure between these two cooks. Between cooks Nos. 3057, at 80 pounds, and 3071 at 100 pounds, the difference is only a little over ½ per cent.

TABLE 3

Composition of Liquor During Cooking

Cook No.	Pressure. Pounds per square inch	Composition of acid at 140° C. Total SO_2 Per cent	Free SO_2 Per cent	Combined SO_2 Per cent	Excess SO_2 Per cent	Composition of acid at 145° C. Total SO_2 Per cent	Free SO_2 Per cent	Combined SO_2 Per cent	Excess SO_2 Per cent
3050	65	1.41	1.22	0.19	1.03	.84	0.74	0.10	0.64
3051	70	1.53	1.35	0.18	1.17	0.93	0.83	0.10	0.73
3056	75	1.89	1.59	.30	1.29	1.39	1.17	.22	0.95
3057	80	2.11	1.77	.34	1.43	1.36	1.18	.18	1.00
3071	100	2.24	1.97	0.27	1.70	1.84	1.70	0.14	1.56

What Results Show

It is evident, then, that acid concentration differences whether produced by temperature variations at constant pressure or by pressure variations accompanying a onstant temperature rise, have no great influence upon the yield or the strength of the pulp.

The results recorded here and previously show that the influence of temperature on the yield and quality of pulp is far greater than any that can be produced by variations in acid concentration obtainable within the permissible range of mill pressures.

*Presented at the Fall meeting of TAPPI, Buffalo, Oct. 14 and 15, 1924.

[1] Chemist in Forest Products, Forest Service, Madison, Wis.

[2] Assistant Wood Technologist, Forest Service, Madison, Wis.

[3] Paper Trade Journal, April 10, 1924 and Technical Association Papers, Series VII.

[4] Chemical analysis by M. W. Bray and J. W. Natwick.

CURRENT PAPER TRADE LITERATURE

Abstracts of Articles and Notes of Papermaking Inventions Compiled by the Committee on Abstracts of Literature of the Technical Association of the Pulp and Paper Industry

CLARENCE J. WEST, Chairman

Sizing

Absorption of Aluminum Hydroxide from Aluminum Sulphate Solutions by Cotton and Wood Cellulose. C. G. Schwalbe. *Z. Angew. Chem.* 37, 125-128 (1924). The contradictions which occur in the literature as to whether aluminum hydroxide is adsorbed from aluminum sulphate solutions by cotton and wood cellulose are ascribed to the fact that the adsorptive power of fibers is conditioned by a large number of variable factors, such as the duration and temperature of steeping, concentration of the solution in which the fiber is steeped, and especially the previous history of the fiber as regards age, temperature and period of drying, degree of swelling and content of incrusting residues, such as lignin and oxycellulose, factors which have an important effect on the nature of the surface. A repetition of the work of Tingle, in which dry fibers were steeped in a solution of aluminum sulphate, confirmed his results that no appreciable adsorption of aluminum takes place under these conditions without solutions of aluminum sulphate, acetate or sodium aluminate. No adsorption was obtained with these solutions even when the cotton cellulose was previously subjected to milling in a ball mill for 7 hrs. The contradictory results obtained in experiments on the adsorptive power of wood cellulose sized with an emulsion of resin in sodium resinate solutions are ascribed to the varying degrees of comminution obtained in hollanders and the difficulty of reproducing the conditions obtaining in a given hollander. The sized cellulose pulp in the hollander is capable of adsorbing much greater quantities of aluminum than the undamaged fibers and the adsorptive power increases with the fineness of comminution up to a certain point and thereafter remains approximately constant. The swelling of wood cellulose fibers exerts a large influence on the power of adsorbing aluminum hydroxide. The presence of pentosans and hexosans also affects the results.—C. J. W.

New Knowledge on the Sizing of Papers. L. P. Zhereboff. *Bum. Prom.* (Russia) II, No. 4, 391-414 (1923). Since the beginning of the world war much new material has appeared on the sizing question due to the work of Sieber, Lorentz, Haug, Stockigt and Klinger, transferring the sizing process into the colloidal field. Chemical reactions are ruled out except in a secondary way, overcoming the hardness of water, etc. The author, however, adheres to the chemical view. The sizing solution is colloidal, but the active sizing acids of colophony are crystalloids. The mentioned authors deny the formation of aluminum resinate. In the case of rosin the size of the molecule is, probably, 0.77 $\mu\mu$, therefore it is impossible to say whether in mill practice we have a colloidal or a molecular solution of rosin. Mill practice favors adding alum to beaters in concentrated solution, under which conditions aluminum resinate can be formed. If the union of aluminum hydrate and rosin is merely an adsorbtion of one colloid to another, then the amount of Al $(OH)_3$ in combination ought to vary. But the results of Remington, Fast, Heuser and Sieber show nearly the same amount of Al_2O_3, namely, 4.78 to 5.69%. Making allowance for variation of acid number of different rosins, it is clear that alum and rosin enter into chemical reaction. The solubility of only about 60% of the rosin-alum precipitate in alcohol obtained by both Sieber and Heuser also point to a chemical union between rosin and alum. The rapidity of precipitation of rosin by alum independently of concentrations speaks against the acceptance of the colloidal interpretation of this reaction. Only animal and vegetable fats and oils act as protective colloids for rosin size solutions; mineral oils are detrimental. In one case where filtered, steam engine condensate was used in diluting a size solution, coagulation of rosin took place until fresh water was substituted. It is possible that the condensed water was positively charged. Oil squeezed out of machine room waste also had a coagulating effect on size solutions. Since it is possible to size paper using sulphuric acid instead of alum, Lorenz's assertion that the positively charged aluminum is indispensable is not supported by experience. Photographs of papers are shown which were dipped in an alcoholic solution of that part of rosin which possessed high ether numbers. These papers absorbed 6 and 9% rosin and remained unsized, but 10 years later were found to be well sized.—M. L. C.

Asa Process for Sizing Paper. E. Westarp. *Paper Trade J.* 78, 77 (Apr. 3, 1924). This process consists in the use of a chemical agent (called Asa solution), the nature of which is not revealed, which transforms glue or gelatine solution into a gel which is stable and does not dissolve under beating conditions, but which melts at the temperature of the drying cylinder, forming a good connection between fibers and filler. A retention up to 90% of the size is claimed, and the retention of filler is greatly increasd (up to 90% of clay). It can be combined with rosin sizing; e. g., 1% of glue treated by the Asa process and 0.25% of rosin gives a sizing fully equal to sizing of the ordinary type using 4% of rosin. The Asa solution can be used for treating the paper for making it stronger and almost grease-proof.—A. P.-C.

Sizing of Paper. Andre Beltzer. *Industrie Chimique* 11, 59-61 (Feb. 1924); 147-149 (Apr. 1924). Description and discussion of rosin sizing, showing that aluminum resinate is the most important sizing agent.—A. P.-C.

Production as Affected by Rosin Sizing. L. W. Crouse. *Paper* 34, No. 2, 44 (May 1, 1924). Practical hints on the causes of some sizing troubles.—A. P.-C.

Sizing and Electricity. The Destruction and Restoration of Sizing Quality in Paper. N. D. Ivanov. *Bum. Prom.* 2, No. 6, 634-643 (Nov.-Dec. 1923). The sizing fastness of paper was destroyed by the action of light from an electric arc for 20 hrs. Air-penetration tests showed that the porosity of the paper remained unchanged. Ironing on a hot plate caused the papers to become well sized again. Electroscope tests indicated that ironing gave the papers an electric charge. Keeping the slack-sized paper in an oven at 100° C. made it well sized again. A sample of paper after ironing was exposed to the light of a voltaic arc which caused the electrification of the paper to disappear. Paper exposed to arc light in an atmosphere of 110° C. also lost its sizing and turned yellow. In this case sizing fastness was not regained through ironing. Paper whose sizing was destroyed by the light of a voltaic arc was exposed to the same arc light behind a red glass for 5 hrs. The temperature between paper and glass reached 55° C. The sizing quality was partly regained. The light of the voltaic arc invariably turned the paper yellow. The original color was obtained on treating the papers for a half hour with 0.5% solution of aluminum sulphate and drying in the air or on the hot plate. The sizing returned only on drying on the hot plate. The preceding experiments showed that sizing quality is dependent upon the electrical condition of the paper. Paper was exposed to a discharge from an induction coil giving a spark 4 mm. long. This caused perforations in the paper 15 to 75 $\mu\mu$ in diameter. Ink spread on one side of the paper caused ink spots on the other side. After ironing the paper the ink did not go through the holes. The holes could be seen by the naked eye when the papers were held up to light. Paper was next exposed to a silent discharge of a Wimshurst electrophorus machine with two ebonite disks, the paper being placed between the two conducting balls. This paper showed no holes. Ink applied on one side of the paper penetrated in spots to the other side. Penetration of ink did not occur after iron-

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ing or after exposure to red (heat) rays. Cathode rays were generated in a glass tube with the aid of an induction coil. The electrodes were of tin, silver plated and perforated. Paper was placed inside the glass tube and exposed to the cathode rays for one minute. The part of the paper within the range of the rays lost its sizing completely. The appearance of the paper remained unchanged. Here, too, the sizing was restored through ironing or through exposure to red rays of light. Papers unsized through the action of light seemed to retain some sizing when the tests were made with ink whose disperse phase was negatively charged, like in eosine inks. The conclusion is drawn that sizing in paper depends upon the electrical condition of the paper. The amount of alum added in the beater is the determining factor due to its positive charge.—M. L. C.

Aluminum Compound for Sizing Paper. H. B. Bishop. U. S. pat. 1,480,928, Jan. 1, 1924. Excess of white clay is heated with dilute sulphuric acid and calcium fluoride so that the whole just boils. A product containing some undecomposed clay, calcium sulphate, calcium fluoride, and colloidal silica and silicic acid in suspension in a solution of aluminum sulphate and fluoride remains. The composition is of value for coating and sizing paper, the soluble salts decomposing the sodium resinate present in the rosin size, and the insoluble materials acting as fillers, with the exception of the colloidal silica and silicic acid, which serve as binders.—A. P.-C.

Detection of Animal Size in Surface Sized Papers. F. T. Carson. *Paper Trade J.* 78, No. 15, 168 (Apr. 10, 1924); *Paper* 33, No. 26, 100 (Apr. 17, 1924). Starch is liable to interfere with the tannin reaction, and the ammonium molybdate method is the most satisfactory. It is essential that it be carried out in dilute acid solution, preferably as follows: boil 0.5 g. of paper in 10 cc. of water, cool, filter, and add twice the volume of a solution of 3 g. of ammonium molybdate in 250 cc. of water and 25 cc. of nitric acid (density 1.2). The test is delicate and none of the substances which might be present in the aqueous paper extract interfere.—A. P.-C.

Rubber Latex in Paper Making. T. J. Keenan. *Paper* 33, No. 23, 17 (Mar. 27, 1924). Brief review of the possibilities of this recent development.—A. P.-C.

Rubber Latex as a Paper Size. A. Van Rossem and W. Frenzyl. *World's Paper Tr. Rev.* 80, 2082-2088 (Dec. 21, 1923); *Paper Mill* 48, No. 11, 14, 16, 18 (Mar. 15, 1924). See *Pulp & Paper* 22, 311 (Mar. 13, 1924); *Paper Trade J.* 78, No. 12, 50 (Mar. 20, 1924).—A. P.-C.

Rubber Latex and the Ageing Qualities of Paper. Frederick Kaye. *World's Paper Tr. Rev.* 80, 1860, 1862 (Dec. 7, 1923). Compare Shaw and Bicking, *Pulp & Paper* 21, 215-217 (1923); *Paper Trade J.* 75, No. 26, 53-55 (Dec. 28, 1923). Criticism of Shaw and Bicking's analytical results on the ground that the prolonged extraction with acetone degraded the rubber.—A. P.-C.

Bleaching

Bleaching Process. F. Waentig. *Z Angew. Chem.* 37, 97 (1924). The author considers that the explanation put forward by Schwalbe and Wenzl to account for the greatly increased rate of bleaching obtained when nitrogen or air free of carbon dioxide is passed through the material under treatment is insufficient. There is no reason to suppose that carbon dioxide formed by the bleaching solution on any organic matter present would so inhibit the bleaching action that the removal of that gas by a current of another gas would produce the acceleration observed. The whole process would appear to need further investigation.—C. J. W.

Bleaching Powder. Reidrew. *Papier* 27, 189-193 (Feb. 1924). Brief review of its preparation, testing and use in paper making.—A. P.-C.

Bleach Liquors from Liquid Chlorine. J. H. MacMahon. *Paper* 33, No. 25, 13-16 (Apr. 10, 1924). A description of the Mathieson Alkali Works' unit system for preparing bleach liquor from liquid chlorine and of the Mathieson multi-unit tank car for the transportation of liquid chlorine, with a discussion of their merits.—A. P.-C.

Bleaching Problems. J. L. A. MacDonald. *World Paper Tr. Rev.* 81, 996-998, 1164-1174 (Mar. 28, Apr. 11, 1924); *Paper Makers' Mo. J.* 62, 157-158 (Apr. 15, 1924). Outline of present day practice, of some recent developments, and of some of the problems remaining to be solved, followed by a general discussion by members.—A. P.-C.

Controlling the Bleaching of Sulphite Pulp. A. M. Cadigan. *Paper Trade J.* 78, No. 16, 39 (Apr. 17, 1924); *Paper* 34, No. 2, 37 (May 1, 1924). Titrate 2 cc. of bleach liquor with decinormal thiosulphate solution and calculate the grams of chlorine per liter and the equivalent "number of pounds of 35% bleaching powder per inch of the measuring tank." Take an average sample of the pulp as charged into the bleacher, measure (e. g. by means of a suitable crucible) an amount equal to about 2.5 g. of air dry pulp, squeeze out the excess moisture, drop into a bottle containing 100 cc. of standard potassium permanganate (150 cc. of decinormal permanganate and 20 cc. of normal sulphuric acid diluted to one liter), stopper and shake, noting the time taken for complete decolorizing. The time in seconds constitutes the "bleachability" of the pulp. A table is prepared giving the relation between the "bleachability" and the number of pounds of bleaching powder per bleacher. It is essential that the consistency of the stock be practically constant, and that the bleacher be always filled to the same extent. The method has given satisfactory results in controlling bleach consumption and color and strength of pulp.—A. P.-C.

Notes on Bleaching. Raymond Fournier. *Papeterie*, Special No. 49-62 (Dec. 1923-Jan. 1924). A review of the theory and mechanism of the bleaching of cellulosic materials by means of bleaching powder.—A. P.-C.

Dyes and Dyeing

Measurement of Color. J. Melrose Arnot. *World's Paper Tr. Rev.* 81, 1502-1506 (May 9, 1924). A short account of the principles of the Ostwald color theory and of their application in industry, more particularly for estimating the degree of bleaching.—A. P.-C.

Causes of Deterioration of Color in Pulp and Paper. Martin L. Griffin, *Paper Trade J.* 78, No. 15, 174 (Apr. 10, 1924); *Paper* 33, No. 26, 104, 106 (Apr. 17, 1924). A brief discussion indicating that the most permanent white may be expected from those raw materials which are purest in nature and which are treated by very gentle processes.—A. P.-C.

Testing Dyes for Tinting and Coloring Paper. G. K. Spence. *Am. Dyestuff Reporter.* 12, 899-902 (1923); *Paper Making* 43, 21-23 (Jan. 1924). A description of the method of determining solubility, strength, shade, fastness to light, fastness to alkali, and nature of the dye (basic, acid or substantive).—A. P.-C.

Fastness of Colors to Light. H. S. Thayer. *Pulp & Paper* 22, 334-335 (Mar. 20, 1924). A discussion of the necessity for fastness to light, the causes of fading, and the method of determining it by means of the Fade-Ometer.—A. P.-C.

Sulphur Black vs. Carbon Black. Leonard Mann. *Paper* 33, No. 22, 10 (Mar. 20, 1924). A discussion of the advantages of sulphur black over carbon black for coloring paper.—A. P.-C.

Tinting of White Papers. John R. Roberts. *Paper Trade J.* 78, No. 22, 49-50 (May 29, 1924). A brief discussion of the relative merits of the various blues used for tinting white papers.—A. P.-C.

Process of Producing Color Effects of Paper. Farbw. Vorm. Meister Lucius & Bruning. Eng. pat. 198,693, June 3, 1922. Color effect of an irregular or variegated character are produced on paper by allowing a stream of irregularly distributed dye solutions or suspensions to flow into the gutter formed between two rollers between which the paper passes. The gutter may be formed in other ways, e. g., at the line of contact of the inclined paper and one roller, and additional means, such as currents of compressed air or

scrapers, etc., may be used to modify further the stream of color.—A. P.-C.

Determining Money Value in Dyes for Paper. Leonard Mann. *Paper Mill* 48, No. 13, 48, (Mar. 29, 1924); *Paper* 33, No. 25, 34 (Apr. 10, 1924). Brief description of the method of comparing dyes for paper making. The only really satisfactory and accurate method is to make comparative dyeings of paper stock under as nearly as possible the same conditions as those under which the dyes are to be used.—A. P.-C.

Apparatus for and Method of Producing Colored Papers. T. M. Atkinson assignor to Royston Paper Co. U. S. pat. 1,475,923, Nov. 27, 1923. The paper is passed through a calender to make the surface perfectly smooth, through a dye bath, between a number of hard-surfaced pressure rolls, through a hot air drier where it travels as festoons and is finally rolled up.—A. P.-C.

Making of Colored Papers. Martin L. Griffin. *Paper Mill* 48, No. 10, 4; No. 11, 4 (Mar. 8, 15, 1924). A general discussion, comparing the mechanism of coloring of paper and of textiles. Dyeing processes as applied in textile finishing are not well adapted to paper. Dyeing of cellulose is fundamentally involved with a reactive absorbent environment induced by hydration, and (or) aided by so-called mordants. This environment should be created so far as possible by process means, mercerizing in textiles and beating in paper, in a dispersing medium. Of the coal tar dyes the substantive should generally be chosen on account of their fastness to light and their affinity for cellulose without mordants. More attention should be given to the use of aniline dye lakes for coloring paper.—A. P.-C.

Fillers

Effect of Artificially Colored Clay on Fast-to-Light Paper. G. K. Spence. *Am. Dyestuff Reporter; Paper Making* 43, 10-11 (Jan. 1924). To detect blueing in China clay: mix 25 g. to a heavy paste with water in a tall beaker, add 3 cc. of concentrated ammonia water, mix thoroughly, place on a steam bath or an top of an oven until the ammonia has been completely volatilized. When the clay first becomes dry there is a brownish coloration on top of the sample, changing to blue in the presence of artificial blueing when all of the ammonia has been expelled. The method is sensitive to 0.008%, and is suitable for the cheaper blues, but not for Indanthrene, which is too expensive for the purpose. No constituent naturally present in the clay will give the blue color. None of the previously published methods are reliable.—A. P.-C.

Sampling China Clay. S. P. Brunn. *Paper* 34, No. 2, 42 (May 1, 1924). Brief description of the method of testing the color of China clay for paper making or bleaching, and of coated art, imitation art and supercalendered papers, which are the principal grades in which large quantities of clay are used.—A. P.-C.

Manufacture of Paper. F. Olander and V. Moisio. Eng. pat. 211,740, Apr. 6, 1923. Fillers, such as China clay, or the like, which it is desired to incorporate with the paper, are added in aqueous suspension to the wet web of paper, either on the top of, in front of, or behind the first suction boxes, the object being to suck the filler into and through the sheet but not out of it. Apparatus is described for delivering a regular, adjustable stream of an aqueous suspension of the filler on to any desired part of the wet web. This method of procedure reduces the loss of fillers to 10% or less and gives a more opaque paper having a good gloss on both sides.—A. P.-C.

Device for Saving Fillers in Paper Making. Fritjof Olander. *Pappers-Och Trävar. För Finland*, Dec. 15, 1923. When a filler, China clay for example, is added to the pulp, it readily forms lumps, which are almost insoluble, and only a small portion is fixed to the fibers, the rest being lost. In addition, impurities such as sand are introduced into the paper, while the most valuable portions of the filler, the fine particles, are wasted. The use of filler in the form of emulsion outside the beater is preferable, because all the grosser impurities (dirt, etc.) may be eliminated, but even so the loss is considerable. It is estimated that the loss is about 60 to 70% with gypsum, 50 to 60% with barytes, 25 to 55% with talcum and kaolin, and 25 to 40% with asbestine. In the new process, filler in the form of an emulsion is run directly on the wire with advantageous results. It is applied to the sheet of paper as it forms on the wire during the first stage of suction. The quantity depends upon the proportion of water in the pulp, degree of beating, and proportion of filling desired. A solution of China clay is prepared in a suitable tank and conveyed by means of a crane to a box divided into two parts by a vertical screen. The screen retains all the grosser particles, sand and other impurities. The emulsion is then run through a pipe connected with a cistern containing enough of the emulsion for 24 hours' requirements. From this cistern the emulsion passes through a pipe to an orifice and thence to a second screen. The orifice may be regulated, so as to be of different diameters, or several orifices of different sizes may be used. An orifice of about 1/5 in. gives paper of 50 g. weight per square meter, a filler content of 2%, an orifice of 1/3 in. a content of 5% on a machine of 125 m. speed. From the cistern the screened emulsion is run into a tank where it is diluted with fresh water to a suitable consistency. The tank is provided with a screen, made like the others of No. 70 wire, which filters out the impurities. The emulsion reaches the sheet through a distributor of wood or metal, of the same length and width as the paper, capable of being regulated at will, so as to allow a stream of liquid of greater or less volume to mix with the sheet. The height from which the emulsion falls may also be regulated, according to the speed of the machine or the thickness of the paper. It is claimed that when the device is carefully operated there is neither streaking nor irregularity in the thickness of the sheet. The process has the following advantages: economy of material, the loss of filler not being over 10%; uniform distribution of the emulsion; the paper is more opaque, and of smoother finish on both sides; is free from scum specks; knots are not formed, and the apparatus does not involve extra operating costs.—P. B.

Miscellaneous

What Happens in the Beater Room. F. Jenkins. *Worlds Paper Tr. Rev.* 81, 570-576 (Feb. 15, 1924); *Paper Maker & Brit. Paper Td. J.* 67, 291-294 (Mar. 1, 1924); *Paper Mill* 48, No. 13, 12, No. 14, 12, 34 (Mar. 29, Apr. 3, 1924). A discussion of the mechanism of "hydration" or "wetness."—A. P.-C.

Beating Problem. F. Jenkins. *World's Paper Tr. Rev.* 80, 1552-1558, 1586-1488 (Nov. 9, 1923). A discussion by a practical beaterman of the function of the beater in fine paper manufacture, explaining the reasons for the various manipulations of the beaterman.—A. P.-C.

Letters of a Paper Maker to His Son. Anon. *Wochbl. Papierfabr.* 55, 397-400 (Feb. 23, 1924). The fifth letter of this series is concerned chiefly with the washing and bleaching hollanders.—J. L. P.

The Kollergang. W. Bruhmann. *Wochbl. Papierfabr.* 55, 524-525 (Mar. 8, 1924). A few notes on kollergang construction and operation are given.—J. L. P.

Letters of a Paper Maker to His Son. Anon. *Wochbl. Papierfabr.* 55, 582-584 (Mar. 15, 1924). The power consumption of washing and half-stock hollanders is given. The use of the common bleaching agents is described.—J. L. P.

A Few Notes on the Schopper-Riegler Beating Tester. E. J. Guild and S. Mills. *Paper Makers' Mo. J.* 62, 159-164 (Apr. 15, 1924); *World's Paper Tr. Rev.* 81, 832-840, 894, 896 (Mar. 14, 1924), 1924); *World's Paper Tr. Rev.* 81, 832-840, 894, 896 (Mar. 14, 9124), 914-922 (Mar. 21, 1924), 1410-1416 (May 2, 1924). The "water-alone" reading is constant for temperatures of 50° to 150° F. With stock, the net wetness varies by not over 1% for a difference of 10° F. at 50 to 70°, and by not over 1% for a difference of 5° at higher temperatures. The length of the fibers has but little influence on the "wetness" indicated, unless the fibers are practically reduced to

the state of flour, when they will clog the screen. Measures with rounded edges are preferable to those with sharp edges, especially with long fibered stock. Within reasonable limits there is an approximate difference of 1% of wetness for each 0.1 g. above or below 2.0 g. (per 1). The authors could find no value to the determination of the amount of water through the fine orifice (at least when considered alone, nor to the sum of the water through both orifices, nor to the time taken for the flow through the large orifice. Allowing pulp to stand in water up to 3 weeks does not alter its wetness. Boiling the stock for one hour and cooling to its original temperature decreases the wetness 1.5° to 8°, according to the original wetness; and prolonged boiling (14 hours) does not further decrease it. Loss of wetness in making the stock into paper was 4° to 15° of wetness, equivalent to 20% to 35% of the original wetness, and the wetness lost cannot be regained by moistening the paper. Several greaseproof or imitation parchments which had looked more wet and transparent than some rag papers known to be very wet-beaten were shown to have wetnesses of only 44°to 68°, while the rag papers had 84° to 88°. By proper manipulation of the roll, wood pulp with initial wetness of 8° could be brought to 31° by quick beating and to 82° by slow beating. Ensuing discussion by members is given, bringing out particularly the value of the tester in the control of news print manufacture. (Compare Hawkings, *Pulp & Paper* 22, 85-91, Jan. 24, 1924).—A. P.-C.

Bedplate for Beating Engines. D. Stuart. U. S. pat. 1,471,218, Oct. 16, 1923. The bedplate is built up of alternate filler plates and knives suitably bolted together in two sets with three hollow castings, one at either side and one between the two sets of knives. These castings are lower than the filler plates, and the top surface is perforated with small holes through which compressed air may be blown to prevent clogging of the grooves of the bedplate. Also, the knives on the inside and on the outside of the trough are set at a slight angle to one another. This arrangement is claimed to facilitate the feeding of the pulp between the roll and bedplate, causing a more uniform distribution of the stock over the surface of the bedplate and decreasing tearing or breaking of the fibers.—A. P.-C.

Jordan Plug Filling. E. A. Strattman. U. S. pat. 1,467,207, Sept. 4, 1923. The ends of the covering sleeve for the plug are provided with lugs projecting beyond the ends of the plug. A pair of flat annular plates are secured by cap screws to the ends of the Jordan plug, these plates being provided with lugs which fit snugly between the lugs of the sleeve thus holding the latter against both circumferential creeping and endwise play. The cap screws holding the end plates are suitably locked in place.—A. P.-C.

Shartle Continuous Beater. C. W. Shartle. U. S. pat. 1,488,218, Mar. 25, 1924. The invention consists essentially in a battery or series of finishing beaters of any required number, co-operating with a raw stock breaker, whereby the full capacity of the breaker may be utilized for continuous operation. The breaker may be made to feed each of the finishing beaters in turn, or else the latter may be equipped with Buehler perforated backfall which eliminates the stock in a continuous manner as fast as it has reached a desired degree of beating, in which case the breaker feeds all the finishing beaters continuously and simultaneously.—A. P.-C.

Beating Engine. S. Lindsay and G. Donaldson. Eng. pat. 208,371. The bedplate is subdivided transversely into groups or sections of one or more bars each, and the pulp is circulated through the spaces formed between the bars or groups of bars of the bedplate. This arrangement ensures that each bar or group of bars in the bedplate is supplied with pulp for beating, so that the pulp supply is efficiently and more uniformly distributed to the several bars of the bedplate.—A. P.-C.

Raising and Lowering Beater Rolls. T. D. Griley. U. S. pat. 1,471,480, Oct. 23, 1923. A pair of levers are attached to the beater roll and shaft and are provided with screws, which carry worm gear nuts for engaging these levers with a worm shaft. A telescopic shaft is connected to the worm shaft and is driven by the beater roll shaft. The rotation of the roll thus serves to raise or lower itself.—A. P.-C.

Beating Engine. S. Milne. Eng. pat. 207,716. The bedplate extends from the vertical plane through the axis of the roll, through an arc of approximately 75°, to a point where the tangential portion of the backfall commences. The backfall extends to a height of approximately one-half the radius of the roll above its axis and the front face is formed in a straight line tangent to the roll and at an angle of about 15° with the vertical. The bars of the bedplate are arranged at equal distances apart, as are the bars of the roll, but the pitch of the two sets of bars is different, so that only one of a series of bars on the roll will register with one of a series of bars on the bedplate, and the two sets register progressively, vernier-like. The hood is adjustably mounted and is kept close to the roll. It is claimed that the power consumption is decreased owing to the elimination of agitation of the stock between the roll and the backfall.—A. P.-C.

Paper Stock Beater. Sigurd Smith. Ger. pat. 390,889, *Papierfabr.* 22, No. 85 (Mar. 2, 1924). Six claims are granted which cover the duplex beater, with vibrating diaphragm between the bedplates and other beater refinements recently described by the inventor in the American journals.—J. L. P.

Pulp Breaker. E. Ellefson. U. S. pat. 1,463,942, Aug. 7, 1923. Two parallel horizontal cylinders are mounted in a common casing and are divided into compartments by means of partitions so arranged that the sections and partitions of the two cylinders are in staggered relation to one another. A shaft is mounted through each cylinder and carries, in each compartment, a propeller element and a breaker element. The partition between the two cylinders is provided with a series of parts so disposed that the pulp in passing through the machine from the inlet to the outlet must travel alternately back and forth from one cylinder to the other until each of the compartments has been traversed. It is claimed that this machine produces a better pulp than the usual type of breaker, the separation of the fibers being more complete and the amount of tearing and cutting greatly reduced.—A. P.-C.

Feeding Stock to Beaters. R. Marx. Eng. pat. 209,693, Sept. 1, 1923. The pulp is fed to the beater by means of an air current, and is so directed that one component of its velocity is in the direction of travel of the stuff. A pipe terminating in a nozzle delivers the material to the roll in a direction approximately tangential thereto. In arrangements where it is desired to feed the final portion of the charge at a slower rate the nozzle feeds a reservoir having a hinged door which, after the first portion is delivered, is regulated to control the delivery of the final portion.—A. P.-C.

Refiner. W. G. Fraser. Eng. pat. 212,314. This is an improvement in beating engines of the conical or disk type. The rotor is normally held in retracted position by a mechanical or fluid pressure operated device and advances over a definite horizontal length into actual operative position by the application of a predetermined or determinable pressure.—A. P.-C.

Feeding Pulp to Beaters. E. J. Medhurst. Eng. pat. 210,166. The sheet is cut into strips, which are then cut transversely into pieces which are delivered to the beater by means of an air blast.—A. P.-C.

The Beater of Today. C. W. Shartle, *Paper Trade J.* 78, No. 21, 48-49 (May 22, 1924). Outline of the development of the Shartle beater and process for treating paper stock for the filler of box board.—A. P.-C.

Diehl Manufacturing Co. Bulletin

The Diehl Manufacturing Company of Elizabeth, N. J., has published a bulletin on "Diehl Motor Driven Exhaust Fans." This describes in a thorough manner the way in which the exhaust fans are operated, what they accomplish, the various types, etc. Illustrations make the bulletin additionally interesting. The Diehl Manufacturing Company will be glad to send a copy of the bulletin to anyone who will write it expressing an interest.

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THE FUNCTION OF COSTING IN INDUSTRIAL RELATIONS*

By J. A. LACEY, F.C.W.A., AND H. G. JENKINS, F.C.W.A.,M.I.E.E.

"The problem of present-day Industrial Relations is so complicated that a solution can only be sought in directions which are hardly understood or appreciated. Some are well-defined and others ill-defined, but that the search is essential to industrial peace and the general welfare of industry is undoubted. It behooves everyone who represents any industrial element, therefore, to investigate the lines upon which he can direct its activities so that he may bring benefits to industry in his own particular field, and add to the sum of human knowledge which is the force by which industrial relations can be improved.

The purpose of this paper is to indicate to what extent the Function of Costings can be used for the purpose of defining and establishing industrial relationship upon a sound economic and psychological basis.

Origin of Costing

"It is probably true to say that the elements of Costing made their presence felt in that early transaction of mankind when the human brain was first called upon to measure what its efforts were worth so that exchange might be possible without mutual destruction.

"It was only during the Great War, when protection against exploitation by some of those whose help was essential to the cause, that it became more generally recognized as a function of industry which could benefit industrial relations.

Ignorance

"The present state of affairs is largely due to the mistrust which arises from ignorance. Ignorance on all sides; and in considering this problem it is essential carefully to examine what form this ignorance takes."

Parties to Industry

"Who are the parties to industry? They are the Consumer, Capital, Management, Executive, and Labor. It is difficult to decide in what order to take these various parties, but in the order in which they are set out they probably show the most illuminating aspect of the subject with which this paper is concerned.

The Consumer

"The expenditure of lavish sums on publicity frequently entices him to buy an article at far more than its economic value. He is ignorant of the degree to which he is exploited by these means. He is unaware under what conditions his purchase has been produced. He is frequently unable to determine whether his investment is good or bad. He may have been educated to some degree in the direction of saving or thrift, but he is entirely uneducated in the much more important subject of spending. He is sometimes paying more than an article is worth and at other times demanding a value far in excess of the amount he is prepared to pay. He has no guide, no criterion except the extremely crude one of popularity, which is so fickle as to represent a condition worse than no guide at all.

Work of the Cost Accountant

"What has already been done in the coal industry and the printing industry indicates quite clearly that here is a field which the Cost Accountant can explore with considerable prospect of contributing to the common welfare. The fluctuations in demand which have contributed to our present industrial difficulties arise partly from the consumer's ignorance as to whether a lower price will be available in the future.

"If an examination could be made it would be found that the industrial concerns who have best weathered the storms of the last few years are those whose prices have attained a real relation to cost, and whose customers have not been exploited.

Capital

"The next party is Capital, which must not be regarded as embracing management. The ignorance of Capital is colossal. Capital controls industry to the greatest extent of all parties. In what direction does its ignorance lie? It is important in this connection to realize that Capital is really represented by the investment of many and not of few. The individual who contributes to a Friendly Society a weekly sum seldom realizes any connection between himself and Capital, and yet that connection is one which induces him to make his contribution. Nor does the individual who insures his life take much interest in the investments from which the Company with which he insures derives its income.

The Small Investor

"Does the individual who is normally referred to as the Small Investor interest himself in the industry with which he is concerned? How often does he connect the rate of dividend with the industrial conditions which have produced it? He might regard it differently if, he received with his dividend, let us say from a Coal Mine or a Railway, a statement of the number of human lives lost in action. Again, with our present legislation, what can the majority of investors, direct or indirect, know of the real conditions of affairs when it is not possible to glean any real information from the balance sheet as published? The plea of greater publicity in this direction which has recently appeared in the financial Press is a sufficient indication of the degree of ignorance of Capital. Many criticisms

*From the Cost Accountant.

can be made as to the impossibility of interference by the many, and it cannot be gainsaid that the only practical way, is government by the few, but nevertheless, more information to the investor could only lead to greater knowledge, which, in its turn, must do much to obviate the subordination of all other interests to the payment of dividends.

Publicity

"Where does the function of costing arise in this connection? It is obvious that the publication of the cost aspect of industrial investment would bring an altogether greater knowledge to Capital and contribute to stability of investment and eliminate much of the speculative element and its influence in Industrial relations. Here the field for the Cost Accountant is wide. He need not give away secrets or help a competitor to increase his competition. That this is possible and will be beneficial is clearly indicated by what has already been done in this direction by our Sister Association in America. Ability to compete does not rest upon the knowledge of what the other fellow is doing, but in the ability to do everything he does better.

Management

"It may appear extremely presumptuous to suggest that a state of ignorance exists in the case of that body of persons which is directly responsible for the management of industry, but the suggestion loses, I think, its presumption when it is realized that the accusation is not one of general ignorance but of ignorance in a particular direction. Wherein does the ignorance of Management lie? It must be admitted that the great body of management has given little study to the future, and the great number of influences upon which depend not only present but future conditions. Industry in general has grown up relying too much upon 'hit or miss' methods. This has resulted in the entry into industry of individuals with insufficient knowledge of its responsibilities and the prospects of success, and it partly accounts for the number of bankruptcies shown by the official records. The increases there are too frequently blamed to conditions of trade instead of to conditions for which there is no excuse for those who enter the managerial status. It would be foolish to argue that failure can never arise from trade fluctuations but there can be little doubt that a better informed or less ignorant management could have obviated many of the disasters of modern industry.

"It is an acknowledged fact that management is seldom in touch to a sufficient degree, with the real condition of affairs with the workers otherwise the long tale of success which has attended efforts on the part of Trade Unions for improvements could not be told, nor would have occurred many of the strikes which have so disorganized industry. If there had not been ignorance on the part of management these conditions would not have arisen, for surely they mean, in the majority of instances, a tale of 'penny wise and pound foolish.' It surely cannot be doubted that ignorance of the psychology of industry has been the reason for a great deal of industrial strife coupled as it has been with a failure to realize the trend of industrial relations in time to avoid progress being obtained at a price out of all proportions to its worth.

Executive

"Is there ignorance in the Executive? The Executive is responsible for the interpretation of the managerial policy and the direct control of the workers. What is necessary for this interpretation of policy and direction is surely knowledge. Does this knowledge exist? The Executive cannot function correctly unless it has a definite plan and policy. How often does such a plan exist? Even if there is a plan is it one which truly attempts to visualize the future? If it does not how can its interpretation inspire that confidence which is so essential to the leadership of men? What is the great bugbear of labor? In the men, the fear of unemployment, dole or no dole. To the honest man work is desirable, work is essential, as affording him a fair opportunity to win what he can of the amenities of life. The absence of the planning of the future is largely to blame for the high degree of casual employment, and, to some extent, for the high degree of unemployment. Again, in many organizations the Executive consists of disjointed members who are ignorant of the plan, the knowledge of which is essential if they are to see what part they are to fulfil. It is not to be wondered at if, under such circumstances, the result is to foster misunderstanding, to create detachment and to increase lack of trust, and to add a disturbing factor instead of a co-operative factor to the industrial machine.

"Here again, to enlarge on the extent to which ignorance exists is not difficult, but it is necessary to pass on to the last element of industry.

The Worker

"It is certainly not possible any longer to allege ignorance of the worker to the same degree as formerly. It may even be suggested that within his own sphere he is one of the best informed parties to industry. But without his own sphere he has undoubtedly been in darkness, and his shortsighted policy has forced him to combine for his own protection and caused him largely to lose that individuality which has made him so valuable on account of his craftsmanship. He is kept in ignorance, and is not willingly ignorant. It can hardly be doubted that since the introduction of Works Committees which have begun to enlighten him in some directions, the relationship of the workers with the other partners of industry has tended to improve wherever this degree of education has been available. How can he be expected to contribute his part to the industrial fabric if his interest is restricted? How can he trust capital, management, executive, when he is unable to see where they are going and to what extent their responsibilities to him are being performed? Such information as the rate of dividend or the balance sheet of a public company are the only things which he can, if he desires, come in contact with as an indication of how his confreres in industry have discharged their responsibilities. How can he be expected to gauge the wage that he can anticipate from his efforts unless he has some information to guide him? Under the circumstances is it to be wondered at if he is easily misled, if he is suspicious of all the information which is given to him, and given to him only under pressure and when every condition is unfavorable to his personal welfare. These factors which are most certainly ignorance are largely responsible for the strained relations of today.

Field of Cost Accounting

"Having reviewed, therefore, under what conditions our industrial troubles are generated it can be assumed that if industrial relations are to be improved we must look in the direction of education. Now this meeting is not for the purpose of trying to decide in what way the present-day industrial evils can be completely overcome but to endeavor to indicate to what degree it is possible for the science of Cost Accounting to contribute its part to improving conditions which all men deplore and which they desire to see improved by every possible means. What is the field of cost accountancy in industrial relations? It may be defined thus. First, to contribute to the formation of a plan and to determine the degree of efficiency in financial terms, to provide information as to the control of cost and price, to bring to management, executive and worker information which will enable them all fully to appreciate the part they play in that part of the industrial machine with which they are concerned.

"These are the internal industrial spheres.

"In the external spheres of industry to contribute to the sum of knowledge of industrial cost and internal finance to the betterment of the condition of all parties to industry, and assist thereby harmonious relations, and generally to do all possible within their sphere to stabilize industry. It can hardly be doubted that the degree of stabilization is the real factor in determining the degree of harmony that can exist in industrial relations. All this may be theoretically right and capable of acceptance but the real question is what is the way in which these objections can be accomplished.

Methods

"It is obviously not possible now to go into detail as to the methods by which the Cost Accountant can accomplish the task which has been outlined as his legitimate function in Industrial Relations. This must vary in each industry and in every type of organization. It is, however, quite possible broadly to indicate the general principles which govern his work and which provide the means by which he can fulfil his important function.

Planning

"The first essential of successful business is a plan. Before the establishment of the complicated organizations of today the plan was in the brain of the proprietor, often ill-defined and hardly realized as existing. Modern conditions demand a well-considered detailed plan covering the organization from beginning to end. The first duty of the Cost Accountant is to act as the convener of the plan. To obtain his information from all sections of the organization, to co-ordinate and order the details of form of these particular plans, to turn them into financial terms and to produce a budget. Having done so, to determine to what degree such a budget can be supported by the financial resources of the undertaking, to adjust, rearrange the plan by co-operation with the various contributing elements of the organization so as to be within these resources, and finally to produce a plan which will result in financial success with safety and without stifling enterprise and progress.

Orbit of the Plan

"This plan must take into consideration every element of the int rnal finances of the concern for which it is made. It must enable the economic price to be determined, it must provide for the determination of allowable expense, for the necessary reserves for the support of the investment in stock, the maintenance of the plant and manufacturing equipment in an up-to-date and efficient condition and for development of the plant and equipment to meet the development of the business. These are a few of the points. There are many, all within the work and knowledge and capacity of the fully-trained Cost Accountant to undertake and satisfactorily solve, without interfering in any way with the legitimate field of the Financial Accountant. Having made the plan and obtained the consent of the controlling power—the Board of Directors—his duty is then to provide the machinery to control the expenditure within the programme, to provide each element of the organization with the information as to its allotted task, make such provision as will enable him to determine at short intervals to what degree the plan is being kept and to provide the main control with information in sufficient time to enable deviations to be known and regulated and make use of any advantage over the plan which becomes available to increase the development of the business.

Education

"It is not sufficient that he should make the plan, advise on the performance and determine the degree to which the plan has been carried out, but he must contribute to the education of the organization to every possible extent.

"He must educate every section and part, and to as great a degree as possible, every individual in the degree to which their personal or sectional efficiency contributes to the success of the whole. He must provide the means of education of every person in the organization in the essential economics of the business, such as realization of value, prevention of waste, and efficiency.

Publicity

"He must preach the gospel of publicity in relation to industrial finance, bring to all grades of manual workers by that publicity, confidence in the management, interest in his job, the sense of achievement, and help him to appreciate that his honest endeavor is essential to his employment, that his cooperation is not only putting profits in the hands of the shareholders but making his employment more secure, and enlighten him in every possible way as to the degree to which he contributes to industry, and, in other words, show the results of his effort so that he may feel the pride of his achievement as an essential part of the whole effort, for without such knowledge no human being can be expected to be content.

Information for the Executive

"To the Executive he must bring to a great degree the same sort of information as to the manual worker, but with the additional information which will enable it, as the first step to control, to exercise that control with judgment and sincerity, looking at all the problems from the broader aspects than is possible when only one side of the consequence of inefficiency is within their realization.

"All concerned must realize their relative importance to every other section of the organization. They must be placed in a position to consider their every action in its financial aspect and know out of the co-ordinated experience of cost in relation to effort, where and how to improve the lot of the manual worker and to what extent it is possible to improve his conditions and his interest. These things are only possible when viewed from the broadest aspect which must embrace that of the economic benefit to be obtained.

Help to the Management

"To the Management, the Cost Accountant in making, watching and tracking the plan can do probably the best work of all in contributing, by his comprehensive knowledge, by his quick determination of the financial aspect of the results, a degree of stability to the managerial policy which without him is not possible. By his long date plans, by his foresight of the future financial difficulties, fend off the worst of all difficulties of management, that of labor turnover, resulting as it does in the necessity for the continuous education of the worker to the job, and bringing in its train mistrust and unemployment—those evils which by their recurrence prevent us from making headway or nullify our best efforts in improving the relationship between capital and labor.

Contribution to the External Elements of Industry

"Nothing has yet been said as to the contribution which the Cost Accountant can make to the external elements of industry. This field is one to which, unfortunately, the Cost Accountant has, up to the present, had practically no opportunity to contribute.

"During the war the usefulness of the Cost Accountant to the Government who was then the consumer, was amply demonstrated by the extensive use of Cost Accountants in the various Government Departments.

"It can scarcely be denied that if the services of the Cost Accountant had been called into use in many of the industrial disputes of recent times, the vexed questions of what industry could afford would have been quickly and positively determined in a manner beyond dispute, and have hastened settlement and provided a more lasting peace than has been possible by the methods used.

Services to Capital

"To Capital the services of the Cost Accountant can be of the greatest benefit in bringing greater publicity and a greater element of truth into the Balance Sheets and Trading Accounts of our present industrial world, than can ever be possible where the Accountant is not inside the industry and concerned with its daily functioning. Certainly the certification of stocks, as a single example, by the professional Cost Accountant would give Capital greater security and eliminate the dishonest and incompetent adventurer of the industrial world.

"Much more can be said of all aspects of the work of the Cost Accountant in industry, but if his operations cover only a small part of the field which has been outlined in this paper, who will say that the function of the Cost Accountant is not essential in every industrial undertaking and that his contribution to the improvement of Industrial Relations can be ignored?"

COST SECTION

Obituary

Harry A. Prizer

PHILADELPHIA, Pa., October 11, 1924.—There passed from the trade ranks during the week one of the most prominent stationers in the Philadelphia trade and head of the William Mann Company, 519 Market street, paper manufacturers with mills located at Lambertville, N. J., producers of manifold and stereotype papers. Mr. Prizer was president of the Mann Company, having held that office since 1910 after serving as vice-president and director of the company. His death followed almost a year's illness resulting from a nervous breakdown and occurred at his summer home in Atlantic City where he went hoping to recuperate. The remains were brought to Philadelphia for burial. Religious services were held at the city residence, 4218 Pine street, with the 500 employees of the factory and store present in a body. Interment was in Mt. Vernon Cemetery in the Joseph H. Mann plot. He was a member of the Union League, Philadelphia Country Club and the Seaview Golf Club, Atlantic City, and also of Meridian Sun Lodge, F. and A. M. He was former president of the Philadelphia Sationers' Association and, through his efforts, the association became one of the leading trade organizations in the Quaker City. He leaves, besides his widow, Dolly Mann Prizer, three sons, all members of the Mann Company. They are William Mann Prizer, Harry Atmore Prizer, Jr., and Howard Davis Prizer.

Enos W. Wellington

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., Oct. 14, 1924.—Enos W. Wellington, a veteran papermaker and foreman for years at the old Union Paper Company, is dead at Monroe, N. H. In 1883 he became foreman of the Beebe & Holbrook Company and in 1886 went to the Parsons Paper Company, remaining at that mill until 1911 when he removed to Monroe, N. H.

Bids for Government Paper

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., October 15, 1924.—The Government Printing Office has received the following bids for 40,000 pounds of binder's board No. 2 quality, 25 x 30 No. 20: The La Boiteaux Company, $68.00 per ton; Dobler and Mudge, $72.50; Mathers-Lamm Paper Company, $69.90, and $80.00; Whitaker Paper Company, $76.97; Kerr Paper Mills Company, $69.00; Twin Falls Binder Board Mills Inc., $76.00; C. B. Hewitt & Bros., Inc., $72.50; The Westport Paper Company, $70.00; The Pratt Paper Company, $83.75 and $101.25; Barton, Duer & Koch Paper Company, $76.20; The Holliston Mills Inc., $72.50 and Philip Rudolph & Son, Inc., $70.00.

The Government Printing Office also received bids on 2,600 lbs. of blue sulphite writing paper, 22 x 34—26 No. 13, as follows: Reese and Reese, 9.56 cents per pound; Old Dominion Paper Company, 9.69 cents; The Baxter Paper Company, 9 cents; The Aetna Paper Company, 10.78 cents; The R. P. Andrews Paper Company, 12.3 cents; Dobler and Mudge, 12.31 cents; Lindemeyr and Harker, 11.5 cents; Barton, Duer & Koch Paper Company, 8.95 cents; and on 4,000,000 envelopes, manila and kraft respectively, 4½ x 10⅜ the bids were as follows: United States Envelope Company, $1.65 per M and $1.58 per M; Union Envelope Company, $1.82; Sewell Clapp Envelopes, $1.78; Dobler & Mudge, $1.83; Oles Envelopes Corpororation, $1.83; and for two commutators: the following bids were received: Roth Brothers & Co., $117.00 net; Carroll Electric Company, $133.00; Doubleday-Hill Electric Company, $130.

The Printing Office also received bids on 35,000 lbs. of white map paper, 50 to 75 per cent rag, various sizes; as follows: R. P. Andrews Paper Company, 16.2 cents per pound and 20 cents per lb.; Virginia Paper Company, 16.2 cents; Barton, Duer & Koch Paper Company, 14.95 cents; and 17.41 cents; American Writing Paper Company, 17.5 cents and 23 cents; Esleeck Manufacturing Company, 30 cents; Old Dominion Paper Company, 14.99 cents and 17.49 cents; Dobler & Mudge, 14.69 cents and 19.59 cents; Baltimore Paper Company, 15.65 cents and 21 cents; and on 10,000 rope manila envelopes 3⅝ x 8⅝ weight basis 17 x 22—500, the United States Envelope Company bid was $1.89 per M.

The Government Printing Office will receive bids on October 17 for 3,600 pounds (200 reams) of 22 x 34—181 No. 9 dark pink glazed manifold bond paper. Bids will also be received on the same date for 1500 sheets of 38 x 38" double faced corrugated strawboard.

The Government Printing Office will receive bids on October 22 for 15,400 pounds (200 reams) of 24 x 38—77, double coated book paper. Bids will also be received on the same date for 49,000 pounds (400 reams) of various sizes double coated book paper and for 26,950 pounds (250 reams) of double coated two sides rag book paper.

The Printing Office has received the following bids for 2,550 pounds of mimeograph paper, basis 25 x 38—500, cut 21½ x 32½: R. P. Andrews Paper Company 8.25 cents per pound; Dobler & Mudge, 13.73 cents; Livingston Paper Company Inc., 9 cents; American Writing Paper Company, 7.9 cents; Old Dominion Paper Company, 7.64 cents; Garrett-Buchanan Company 7.15 cents; and on 168,075 lbs. white sulphite bond paper 31½ x 48, substance No. 16 and No. 20 bids were as follows: R. P. Andrews Paper Company, 6.95 cents per lb.; Old Dominion Paper Company, 7.679 cents; American Writing Paper Company, 8.25 cents; Import Paper Company, 7.35 cents; Aetna Paper Company, 8.87 cents; Maurice O'Meara Company, 8.5 cents; 7.8 cents; Dobler & Mudge, 7.2 cents; Reese & Reese, 8.215 cents and 7.48 cents.

On 19,500 lbs. yellow sulphite writing paper 24 x 38—39, No. 16, the following bids were received: Allied Paper Mills, 7.75 cents per lb.; R. P. Andrews Paper Company, 8.15 cents; Dobler & Mudge, 10.5 cents; Reese & Reese, 9.095 cents; Old Dominion Paper Company, 7.99 cents; American Writing Paper Company, 8.5 cents; Maurice O'Meara Company, 8.5 cents; Perkins-Goodwin Company, 8.37 cents; 8.12 cents; Lindemeyr & Harket, 10.19 cents; Barton Duer & Koch Paper Company, 8.25 cents; Aetna Paper Company, 8.37 cents; Import Paper Company, 8.8 cents.

The Government Printing Office will receive bids on October 22 for 4.700 pounds (200 reams) of 21 x 32—23½, No. 13 green glazed manifold bond paper.

Power Situation Stirs Paper Men

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., October 14, 1924.—Holyoke paper and other manufacturers are keenly interested in the outcome of negotiations under way between the Turners Falls Power Company and the Holyoke Street Railway Company over the sale of the powerhouse of the latter company to the Turners Falls concern as it is figured that this sale is the precursor of the entrance of the Turners Falls Power Company into the power field in Holyoke.

Paper mills in Holyoke, many of them, are not only taking water power but additional electric power from the Holyoke Water Power Company. Some are also using electric power furnished by the municipal department of the city of Holyoke. The advent of a third power company would tend to upset the present situation.

The Holyoke Water Power Company had previously entered into negotiations with the Holyoke Street Railway Company to furnish them with power from its plants to operate its lines. These negotiations were broken off about the middle of September for what reason the Water Power Company has been unable to ascertain.

It is reported that a group of paper manufacturers has been interested for some time in getting a rival company into Holyoke with the idea that cheaper power rates might result. Neither the head of the railway Company or the waterpower company has issued as yet any statement.

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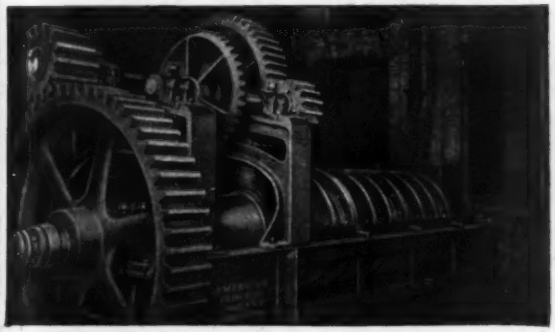

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ENGLISH AND AMERICAN

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Manufacturers of Blotting, Matrix, Filter and all other grades of absorbent papers.

Registered brands Magnet and Columbian, also Lenox and Arlington.

SEND FOR SAMPLES AND PRICES

Paper Goods Products in United States

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., October 8, 1924.—The Department of Commerce announces that, according to the data collected at the biennial census of manufactures, 1923, the establishments engaged primarily in the manufacture of paper goods, reported products valued at $120,431,865, representing an increase of 43.2 per cent as compared with 1921, the last preceding census year. Of this amount, $12,548,465 was contributed by playing cards and $107,883,400 by miscellaneous paper products, such as crepe and surface-coated paper, tar and fly paper, corrugated paper, waxed and oiled paper, papier-maché, milk-bottle caps, etc. This classification does not include the manufacture of the paper itself, nor of paper bags and boxes, envelopes, labels and tags, paper patterns, and various other paper products which are separately classified.

In addition, paper goods were manufactured to some extent by establishments engaged primarily in other industries. The value of such goods thus made outside the industry proper in 1921 was $3,603,939, an amount equal to 4.3 per cent of the total value of products reported for the paper-goods industry. The corresponding value for 1923 has not yet been ascertained but will be shown in the final reports of the present census.

Of the 311 establishments reporting for 1923, 74 were located in New York, 55 in Massachusetts, 29 in New Jersey, 27 in Pennsylvania, 25 in Illinois, 22 in Ohio, 15 in Wisconsin, 9 in Rhode Island, 7 each in California, and Michigan, 5 each in Connecticut, Indiana, and Vermont, 4 each in Missouri, New Hampshire, and Virginia, and the remaining 14 in the District of Columbia, Georgia, Iowa, Kentucky, Maine, Maryland, Minnesota, Oregon, South Carolina, Texas and West Virginia.

The statistics for 1923 and 1921 are summarized in the statement below. The figures for 1923 are preliminary and subject to such correction as may be found necessary upon further examination of the returns.

	1923	1921	Per cent of increase[a]
Number of establishments	311	290	7.2
Wage earners (average number)[b]	14,724	11,510	27.9
Maximum month	May 15,188	Dec. 12,342	...
Minimum month	Jan. 14,265	Sept. 11,043	...
Per cent of maximum	93.9	89.5	...
Wages	$16,261,348	$11,807,357	37.7
Paid for contract work	$138,251	$170,759	—19.0
Cost of materials (including fuel and containers)	$68,763,211	$49,872,170	37.9
Products, total value	$120,431,865	$84,129,401	43.2
Playing cards	$12,548,465	$8,940,573	40.4
Other products	$107,883,400	$75,188,828	43.5
Value added by manufacture[c]	$51,668,654	$34,257,231	50.8
Horsepower	37,842	(d)	...
Coal consumed (tons of 2,000 lbs.)	152,003	(d)	...

[a] A minus sign (—) denotes decrease.
[b] Not including salaried employees or proprietors and firm members. Statistics for these classes will be given in final report.
[c] Total value of products less cost of materials.
[d] Not reported.

Box Board Statistics

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., October 11, 1924.—The Department of Commerce announces monthly figures on the operations of boxboard manufacturers, based on reports of from 75 to 82 companies each month, beginning with November, 1923, as follows:

Year and month	Operation, Inch hours	Tons: Production	Tons: Orders received	Tons: Unfilled orders (end of month)	Tons: Consumption waste paper	Tons: Stock of waste paper (end of month): On hand	Tons: Stock of waste paper (end of month): In transit	Tons: Stock of waste paper (end of month): Unshipped purchases
1923								
November	6,235,129	142,001	140,686	66,362	129,661	128,399	9,428	20,333
December	6,188,182	140,553	144,419	77,268	128,976	149,670	11,690	19,982
1924								
January	7,183,900	160,817	186,379	92,658	151,145	114,137	13,224	36,541
February	6,773,994	156,002	158,775	88,214	148,329	107,720	12,953	23,890
March	7,699,404	176,293	152,861	85,989	165,986	124,774	13,997	21,877
April	7,629,777	167,580	146,018	66,504	155,790	127,392	11,533	25,709
May	*7,497,308	*161,820	*147,961	*65,811	*153,848	*129,950	11,632	26,354
June	6,062,222	141,641	151,161	81,399	139,883	145,542	13,674	33,522
July	6,028,488	141,364	155,871	100,837	137,688	150,040	16,939	34,370

*Revised.

Duty on Filter Masse

WASHINGTON, D. C., October 8, 1924.—The Customs Service of the Treasury Department has held that filter masse paper is properly dutiable at 6 cents per pound and 15 per cent ad valorem under paragraph 1304 of the Tariff Act.

Assistant Secretary of the Treasury Moss in a communication to the Collector of Customs at Cleveland states that his attention has been called "to a variance of opinion between your port and the port of New York in the classification of merchandise described as 'filter masse.'" The secretary in his communication continues:

"The Customs Information Exchange states that it is the practice at your port to assess duty upon the merchandise under paragraph 1309 of the tariff act at the rate of 5 cents per pound and 15 per centum ad valorem, whereas at New York it is returned for duty under paragraph 1304 at the rate of 6 cents per pound and 15 per centum ad valorem. You express the opinion, however, that the merchandise is properly dutiable at the rate of 20 per centum ad valorem under paragraph 1303 presumably under the provision for filter masse or filter stock.

"It appears from an examination of the sample submitted by the Customs Information Exchange that it is made of numerous layers of thin crepe paper, not weighing over 6 pounds to the ream of 480 sheets 20 x 30, and it appears that it is known as absorbent paper wadding and is used principally as a substitute for absorbent cotton. The merchandise in question appears to be similar to that which was the subject of the board's decision in T. D. 33347, and following that decision the department concurs in the opinion of the Collector at New York that the merchandise is properly dutiable at the rate of 6 cents per pound and 15 per centum ad valorem under paragraph 1304. You will be governed accordingly."

Reforestation in California

LOS ANGELES Cal., October 6, 1924.—That a fund between $200,000 and $300,000 will be available in a short time for reforestation in the Angelus Forest, was the announcement made by Colonel Greeley, head of the United States Forest Service, at a meeting of various chambers of commerce representatives, Congressman Fredericks and Lineberger, County Forester Elintham and Colonel Greeley, held here last week.

An inquiry board, composed of forsetry men and members of local organizations, will make a thorough investigation of the great brush and timber fire in the San Gabriel Mountains, where an area estimated between 45,000 and 50,000 acres was burned, The purpose of the meeting was to discuss reforestation, forest fire fighting methods and precautions.

The work performed by the county toward reforesting portions of the area burned in the 1919 fire was outlined before the representatives. A very good growth of young trees was obtained in certain sections and because of this success the federal government is willing to back the work of reforestation to several hundred thousand dollars, declared Colonel Greeley.

In an effort to prevent any similar catastrophe and safeguard the timber land of the Angelus Forest, plans are being developed for the construction of a great network of firebreaks to be used to handle any future emergency.

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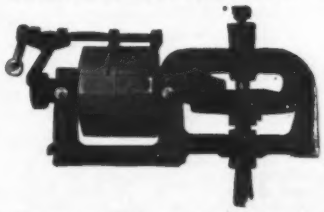

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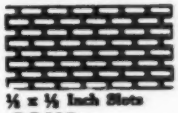

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Imports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING OCTOBER 11, 1924

SUMMARY

News print.....549 rolls.
Printing paper.....48 cs.
Wall paper.....14 cs.
Wrapping paper.....951 rolls, 44 bdls., 26 bls.
Cigarette paper.....76 cs.
Writing paper.....26 cs.
Tissue paper.....8 cs.
Filter paper.....90 bls.
Surface coated paper.....72 cs.
Hanging paper.....116 rolls.
Kraft paper.....100 rolls.
Decalcomania paper.....16 cs.
Emery paper.....33 cs., 28 bls.
Baryta coated paper.....60 cs.
Bowl paper.....15 bls.
Photo paper.....2 cs.
Miscellaneous paper, 30 cs., 2,796 rolls, 82 bls., 7 bdls.

CIGARETTE PAPER

F. P. Gaskell & Co., Collamer, Havre, 20 cs.
Standard Products Corp., by same, 40 cs.
Liggett & Myers Tobacco Co., by same, 16 cs.

WALL PAPER

Whiting & Patterson, Inc., Berengaria, Southampton, 14 cs.

HANGING PAPER

Drinhausen, Hallkott Paper Co., America, Bremen, 116 rolls.

DECALCOMANIA PAPER

L. A. Consmiller, America, Bremen, 10 cs.
C. W. Sellers, Columbus, Bremen, 6 cs.

NEWS PRINT

M. Gottesman & Co., Inc., Drottningholm, Gothenburg, 549 rolls.

PRINTING PAPER

Perry, Ryer & Co., Tuscania, Glasgow, 44 cs.
International Forwarding Co., Reliance, Hamburg, 4 cs.

WRAPPING PAPER

Chemical National Bank, Reliance, Hamburg, 906 rolls.
Blauvelt, Wiley Paper Mfg. Co., Tuscania, Glasgow, 44 bdls.
C. K. MacAlpine Co., Drothningholm, Gothenburg, 26 bls.
C. K. MacAlpine, by same, 45 rolls.

KRAFT PAPER

Arkell Safety Bag Co., Drottningholm, Gothenburg, 100 rolls.

WRITING PAPER

F. C. Strype, Masaniello, Marseilles, 9 cs.
W. J. Byrnes, Collamer, Havre, 3 cs.
Guibout Freres, Berengaria, Havre, 14 cs.

EMERY PAPER

Impex Trading Co., America, Bremen, 33 cs.
Impex Trading Co., by same, 28 bls.

BARYTA COATED PAPER

Globe Shipping Co., America, Bremen, 60 cs.

SURFACE COATED PAPER

Whiting & Patterson Co., Minnekahda, Hamburg, 72 cs.

TISSUE PAPER

G. W. Sheldon & Co., American Banker, London, 8 cs.

FILTER PAPER

J. Manheimer, Homeric, Bordeau, 90 bls.

BOWL PAPER

C. A. Johnson, Baltic, Liverpool, 15 bls.

PHOTO PAPER

J. J. Gavin, Baltic, Liverpool, 2 cs.

PAPER

Wilkinson Bros. & Co., Inc., Drottningholm, Gothenburg, 37 bls.
National Paper & Type Co., by same, 7 bls.
The Borregaard Co., Inc., by same, 16 bls.
The Borregaard Co., Inc., by same, 1,876 rolls.
Brooklyn Standard Bag Co., by same, 119 rolls.
Crepe Kraft Paper Co., by same, 44 rolls.
L. Bamberger & Co., by same, 747 rolls.
L. Bamberger & Co., by same, 7 bdls.
L. Bamberger & Co., by same, 22 bls.
C. G. Keferstein, Minnekahda, Hamburg, 10 rolls.
C. G. Keferstein, by same, 2 cs.
Japan Paper Co., by same, 12 cs.
A. Goodman & Co., by same, 13 cs.
E. Dietzgen & Co., Francisco, Antwerp, 2 cs.
Whiting & Patterson Co., Inc., Berengaria, Southampton, 1 cs.

RAGS, BAGGINGS, ETC.

C. Spence Co., Masaniello, Marseilles, 86 bls. rags.
Amsinck, Sonne & Co., Maryland, London, 31 bls. rags.
L. H. Abenheimer, Francisco, Antwerp, 214 bls. rags.
J. Jaffe, Collamer, Havre, 5 bls. rags.
Albion Trading Co., by same, 297 bls. rags.
Stone Bros., by same, 15 bls. rags.
Lobsitz Mills, by same, 14 bls. rags.
Salomon Bros. & Co., Collamer, Dunkirk, 105 bls. flax waste.
Salomon Bros. & Co., by same, 24 bls. thread waste.
Royal Manufacturing Co., by same, 48 bls. thread waste.
D. M. Hicks, by same, 35 bls. rags.
Darmstadt, Scott & Co., by same, 44 bls. rags.
L. H. Abenheimer, Nessian, Manchester, 182 bls. bagging.
W. Hughes & Co., City of Eureka, Genoa, 100 bls. cotton waste.

OLD ROPE

W. H. Cummings & Sons, Collamer, Havre, 50 bales.
W. H. Cummings & Sons, by same, 16 coils.
Cohen & Co., Aguistar, Nassau, 7 bales.
W. Schall & Co., Masaniello, Barcelona, 64 coils.
Brown Bros., Francisco, Hull, 85 coils.
U. S. Mortgage & Trust Co., America, Bremen, 149 coils.

WOOD PULP

E. M. Sergeant & Co., Drottningholm, Gothenburg, 762 bls. sulphite pulp.
E. M. Sergeant & Co., by same, 747 bls. dry soda pulp.
Hornell & Donaldson, by same, 334 bls. wood pulp.
Tidewater Papermills Co., Stella, Murray Bay, 5,439 bls. wood pulp.
Bulkley, Dunton & Co., America, Bremen, 1,250 bls. wood pulp.
J. Anderson & Co., Bergensfjord, Kristiania, 2,100 bls. sulphite pulp.

WOOD FLOUR

B. L. Soberski, Bergensfjord, Frederickstadt, 750 bags.

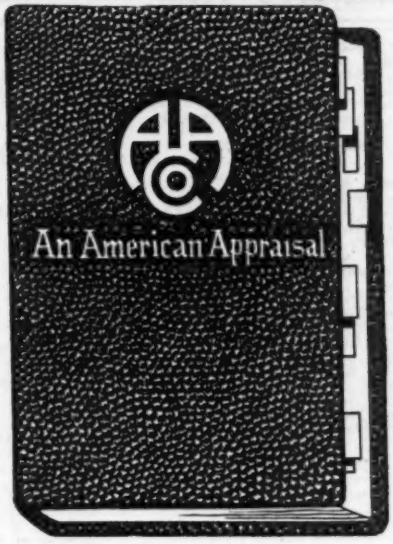
BOSTON IMPORTS

WEEK ENDING OCTOBER 11, 1924

Anglo American Trust Co., Nubian, Liverpool, 21 bags rag cuttings.
Baring Bros & Co., Ltd., by same, 23 bags new cotton rag cuttings.
Lincoln National Bank for Cincinnati customer, 107 bls. old rags.
J. Anderson & Co., Modig, Scandinavian ports, 6,000 bls. dry sulphate pulp.
M. Gottesman & Co., by same, for Portland customer, 5,000 bls. kraft sulphate pulp.
On order, by same, 3,000 bls. dry unbleached sulphate pulp.
J. Anderson & Co., by same, 1,500 bls. dry sulphate pulp.
Pagel, Horton & Co., Inc., by same, 3,600 bls. dry wood pulp.
Scandinavian Pulp Agency, Inc., by same, 250 tons dry pulp.
Hartig Pulp Co., by same, 500 tons kraft sulphate pulp, 50 tons sulphite pulp.
Bulkley, Dunton & Co., by same, 25 tons sulphite pulp, 100 tons sulphate pulp.
Hartig Pulp Co., by same, 2,400 bls. dry sulphite pulp.
Bulkley, Dunton Co., by same, 2,624 bls. sulphite pulp, 2,500 bls. sulphate pulp.
F. S. Webster, Siberian Prince, Liverpool, 5 cs. tissue paper.
G. F. Malcolm, by same, 6 cs. tissue paper.
New England Waste Co., by Meltonian, Liverpool, 19 bls. cotton rags.
T. D. Downing & Co., by same, 188 bls. new cotton rag cuttings.
Baring Bros. & Co., by same, 93 bls. cotton rags.
C. J. W., Boston, West Queechee, Liverpool, 231 bls. paper stock.
S. F. N., Boston, by same, 65 bls. paper stock.
On order for Boston customer, Texas, Scandinavia, 400 bls. dry pulp.
Goldman Sachs, by same, 598 bls. old rags.
National City Bank, by same, 200 bls. old rags.
Southark National Bank, by same, 37 bls. old rags.
Johaneson, Wales & Sparre, Inc., Kolsnoren, Gothenburg, 1,000 bls. sulphite pulp.
Johaneson, Wales & Sparre, Inc., Henrik Ibsen, Frano, 3,900 bls. kraft pulp.
Bulkley, Dunton & Co., Sveadrott, Scandinavia, 750 bls. dry chemical pulp.
Price & Pierce, Ltd., by same, 6,600 bls. dry sulphite pulp.
Pagel, Horton & Co., by same, 3,000 bls. dry sulphite wood pulp, 2,700 bls. pulp.
J. Anderson & Co., by same, 2,700 bls. wood pulp.

IMPORTS FOR BALTIMORE VIA BOSTON

Bulkley, Dunton & Co., Sveadrott, Scandinavia, 1,000 bls. dry chemical pulp.
Pagel, Horton & Co., by same, 12,600 bls. dry sulphate pulp.
On order, by same, 700 bls. dry sulphate pulp.
Price & Pierce, Ltd., by same, 600 bls. dry sulphite pulp.
Brown Bros., by same, 1,800 bls. pulp.
J. Anderson, by same, 600 bls. pulp.
Pagel, Horton & Co., by same, 1,200 bls. pulp.
Nilson, Lyon & Co., by same, 2,250 bls. dry chemical wood pulp.
Bulkley, Dunton & Co., by same, 750 bls. dry chemical pulp.
Mechanics & Metals National Bank, West Queechee, Liverpool, 1,200 bls. wet mechanical wood pulp.
On order, by same, 320 bls. wet mechanical pulp.
On order, by same, 341 bls. old rags.
Peabody Acceptance Corp., by same, 1,500 bls. dry sulphate wood pulp.
Johanesen, Wales & Sparre, by same, 1,000 bls. dry sulphate wood pulp.
Perkins, Goodwin Co., by same, 2,160 bls. dry chemical wood pulp.
Price & Pierce, Ltd., by same, 1,375 bls. dry pulp.
Johanesen, Wales & Sparre, by same, 375 bls. dry pulp.
On order, by same, 1,600 bls. dry pulp.
D. P. Walton Co., by same, 104 bls. wrapping paper.
The Borregaard Co., by same, 500 bls. dry pulp.



For additional information on the everyday uses of An American Appraisal, send for the pamphlet, (V-9), "The Property Owner's Handbook," for monograph "Property Records—Their Effect on Profit and Loss," and for "When Insurance Insures and When It Doesn't."

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One of the many uses of American Appraisals that have won for them their supreme position in American business is the protection they offer against thievery and waste.

To many clients, this is even more important than the obvious utility and advantages of An American Appraisal for insurance, finance, accounting and Income Tax usage.

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"I make it a point to advertise it strongly to our entire organization every time you come in here and revise your appraisal. It's the best moral force that we have against thievery, waste and carelessness in taking care of the company's property.

"After the appraisal is delivered, I have the superintendent bring in the Department heads and we go over it. Department heads are responsible for the existence and good condition of the property in their charge. The appraisal is a fine checkup on their stewardship, and they know it."

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INVESTIGATIONS, VALUATIONS, REPORTS — INDUSTRIALS, PUBLIC UTILITIES, NATURAL RESOURCES

An American Appraisal

THE AUTHORITY

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Market Quotations

PAPER SECURITIES CLOSING PRICES TUESDAY

Reported by Stewart Tuttle & Co., Inc., 120 Broadway, New York

Stocks	BID	ASKED
Abitibi Power and Paper Company, Ltd.	55½	55⅝
Abitibi Power and Paper Company, Ltd, Pfd.	98	99
American Writing Paper Company, Pfd.	2¼	3
Brompton Pulp and Paper Company, Ltd.	28	28⅜
Donnacona Paper Company, Ltd.	45	50
Donnacona Paper Company, Ltd., Pfd.	98	100
International Paper Company	42½	42¾
International Paper Company, Pfd.	71½	73
Laurentide Company, Ltd	80¼	80½
Price Brothers	35	35¼
St. Maurice Paper Co., Ltd.	83	85
Smith (Howard) Paper Mills, Ltd.	25	28
Spanish River Pulp and Paper Mills, Ltd.	102⅜	102½
Spanish River Pulp and Paper Mills, Ltd., Pfd.	113	113½
Union Bag and Paper Corp.	37¼	38½
Wayagamack Pulp and Paper Company, Ltd.	36	37
West Virginia Pulp and Paper Company	53	55

Bonds	BID	ASKED
Abitibi Power and Paper Company, Ltd., 1st 6s, 1934	100	101
Abitibi Power and Paper Company, Ltd., Gen. 6s 1940	96	98
Abitibi Power and Paper Company, Ltd., Con. 8s 1931	102½	103½
Belgo Canadian Paper Company, 1st 6s 1943	97	97½
Brown Company Serial 6s	99½	100
Carthage Sulphite Pulp and Paper Company, 1st 8s 1941	35	50
Continental Paper and Bag Mills Corporation, 1st and Ref. 6½s, Series "A," 1944	94	95
Donnacona Paper Company, Ltd., 1st 6s 1940	98	100
Eddy Paper Company, 1st 7½s 1931	92¼	93½
Gair (Robert) Company, 1st 7s 1937	98	98½
International Paper Company, 1st and Ref. 5s (Series "B") 1947	86	86⅛
Mattagami Pulp and Paper Company, 1st 6s 1937	58	60
Mattagami Pulp and Paper Company, 1st 7s 1949	20	25
Oswego Falls Corporation, 1st 8s 1942	101½	102
Oxford Paper Company, 1st and Ref. 6s (Series "A") 1947	99	101
Parker, Young Company, 1st 6½s 1944	95½	97½
Paterson Parchment Paper Company, 1st 6s (Series "A") 1938	97½	99½
Peshtigo Paper Company, 1st 7s (Series "B") 1942	92	94
Price Bros. & Co., Ltd., 1st 6s (Series "A") 1943	98¾	99¾
Provincial Paper Mills, Ltd., 1st 6s 1940	98	100
Riordon Pulp and Paper Company, Ltd., Gen. 6s 1929	25½	30
Riordon Pulp and Paper Company, Ltd., 6s 1942	91	93
Riordon Company, Ltd., 1st and Ref. 8s 1940	98	100
River Raisin Paper Company, 1st 8s 1936	103	104
Smith (Howard) Paper Mills, Ltd., 6s 1934	95	95½
Smith (Howard) Paper Mills, Ltd., 1st Ref. 7s 1941	90	95
Spanish River Pulp and Paper Mills, Ltd., 1st 6s 1931	102½	103
Spanish River Pulp and Paper Mills, Ltd., Gen. 8s 1941	106	106½
Wayagamack Pulp and Paper Company, Ltd., 1st 6s 1951	74	77

Paper

F. o. b. Mill

Ledgers	11.00	@38.00
Bonds	9.00	@45.00
Writings—		
Extra Superfine	14.00	@30.00
Superfine	14.00	@30.00
Tub Sized	10.00	@15.00
Engine Sized	8.00	@11.00
News—		
Rolls, contract	3.65	@ 3.90
Rolls, transit	3.75	@ 4.25
Sheets	4.15	@ 4.40
Side Runs	3.25	@ 4.00
Book, Cased—		
S. & S. C.	7.00	@ 9.75
M. F.	7.00	@ 8.85
Coated and Enamel	9.00	@15.00
Lithograph	9.00	@14.00
Tissues—		
White No. 1	.75	@ .90
White No. 2	.70	@ .80
Colored	1.05	@ 1.90
Anti-Tarnish	1.40	@ 2.30
Kraft	.90	@ 1.00
Manila	.75	@ .80
Kraft—		
No. 1 Domestic	5.50	@ 6.25
No. 2 Domestic	5.00	@ 5.75
Imported	5.50	@ 5.75
Manila—		
No. 1 Jute	9.00	@
No. 2 Jute	7.75	@ 8.50
No. 1 W'ood	4.75	@ 5.25
No. 2 Wood	4.00	@ 4.50
Butchers	3.75	@ 4.00
Fibre Papers—		
No. 1 Fibre	5.50	@ 5.75
No. 2 Fibre	4.75	@ 5.25
Common Bogus	2.50	@ 2.75
S. Screening	3.25	@ 3.75
Card Middler	4.00	@ 5.00

Boards—per ton—		
News	50.00	@52.50
Straw	50.00	@55.00
Chip	37.50	@42.50
Binders' Boards	75.00	@80.00
Sgl. Mla. Lt. Chip	55.00	@62.50
Wood Pulp	70.00	@75.00
Container	62.50	@67.50
Sulphate Screenings—		
Coarse	.80	@ .90
Refined	1.75	@ 2.00
Ground Wood—		
Screenings	20.00	@25.00
Glassine—		
Bleached, basis 25 lbs.	12.00	@15.00
Bleached, basis 20 lbs.	14.00	@17.00

Mechanical Pulp

(Ex-Dock)

No. 1 Imported	35.00	@40.00

(F. o. b. Mill)

No. 1 Domestic	27.50	@34.00

Chemical Pulp

(Ex-Dock, Atlantic Ports)

Sulphite (Imported)—		
Bleached	3.75	@ 4.50
Easy Bleaching	2.90	@ 3.15
No. 1 strong unbleached	2.75	@ 3.00
No. 2 strong unbleached	2.50	@ 2.75
No. 1 Kraft	2.75	@ 2.85
Sulphate—		
Bleached	3.50	@ 3.65

(F. o. b. Pulp Mill)

Sulphite (Domestic)—		
Bleached	3.50	@ 4.50
Easy Bleaching Sulphite	2.60	@ 3.00
News Sulphite	2.50	@ 2.75
Mitscherlich	3.00	@ 3.25
Kraft (Domestic)	2.75	@ 3.00
Soda Bleached	3.90	@ 4.10

Domestic Rags

New Rags

Prices to Mill, f. o. b. N. Y.		
Shirt Cuttings—		
New White, No. 1	14.00	@15.00
New White, No. 2	7.00	@ 7.75
Silesias, No. 1	8.75	@ 9.25
New Unbleached	10.50	@11.00
Washables	5.50	@ 6.15
Fancy	6.50	@ 7.75
Blue Overall	7.75	@ 8.25
New Blue	5.00	@ 5.50
New Black Soft	4.75	@ 5.25
New Light Seconds	3.00	@ 3.25
O. D. Khaki Cuttings	4.50	@ 4.75
Men's Corduroy	4.00	@ 4.25
New Canvas	7.00	@ 7.50
New Black Mixed	2.75	@ 3.00

Old Rags

White, No. 1—		
Repacked	6.25	@ 6.50
Miscellaneous	5.50	@ 5.75
White, No. 2—		
Repacked	4.25	@ 4.50
Miscellaneous	3.75	@ 4.00
St. Soiled, White	3.00	@ 3.50
Thirds and Blues—		
Repacked	4.00	@ 4.25
Miscellaneous	3.00	@ 3.25
Black Stockings	3.50	@ 3.75
Roofing Rags—		
Cloth Strippings	1.90	@ 2.00
No. 1	2.40	@ 2.50
No. 2	2.30	@ 2.40
No. 3	1.20	@ 1.30
No. 4	1.20	@ 1.30
No. 5A	1.80	@ 1.50

Foreign Rags

New Light Silesias	7.50	@ 8.75
Light Flannelettes	8.00	@ 8.25
Unbl'chd Cottons	9.50	@10.00
New White Cuttings	11.50	@12.50
New Light Oxfords	7.75	@ 8.25
New Light Prints	7.25	@ 7.75
New Mixed Cuttings	3.25	@ 3.75
New Dark Cuttings	3.00	@ 3.50
No. 1 White Linens	10.00	@11.00
No. 2 White Linens	7.00	@ 8.00
No. 3 White Linens	6.00	@ 6.50
No. 4 White Linens	4.50	@ 5.50
Old Extra Light Prints	4.50	@ 5.00
Ord. Light Prints	3.00	@ 3.50
Med. Light Prints	2.40	@ 2.50
Dutch Blue Cottons	3.50	@ 4.00
Ger. Blue Cottons	3.00	@ 3.25
Ger. Blue Linens	3.50	@ 4.00
Checks and Blues	2.25	@ 2.50
Dark Cottons	1.50	@ 1.75
Shoppery	1.40	@ 1.60
French Blues	3.25	@ 3.75

Bagging

Prices to Mill F. o. b. N. Y.		
Gunny No. 1—		
Foreign	1.80	@ 2.00
Domestic	1.75	@ 2.00
Wool, Tares, light	1.50	@ 1.60
Wool, Tares, heavy	1.50	@ 1.60
Bright Bagging	1.50	@ 1.60
Sound Bagging	.90	@ 1.00
Manila Rope—		
Foreign	6.25	@ 6.50
Domestic	6.50	@ 6.75
New Bu. Cut	2.40	@ 2.60
Hessian Jute Threads—		
Foreign	2.25	@ 2.50
Domestic	2.10	@ 2.20

Old Waste Papers

(F. o. b. New York)

Shavings—		
Hard, White, No. 1	3.50	@ 3.75
Hard, White, No. 2	3.25	@ 3.50
Soft, White, No. 1	2.90	@ 3.10
Flat Stock—		
Stitchless	1.50	@ 1.60
Over Issue Mag.	1.60	@ 1.70
Solid Flat Book	1.45	@ 1.55
Crumpled No. 1	1.25	@ 1.35
Solid Book Ledger	1.80	@ 1.90
Ledger Stock	1.60	@ 1.70
New B. B. Chips	.50	@ .55
Manilas—		
New Env. Cut	2.45	@ 2.55
New Cut. No. 1	1.75	@ 2.00
Extra No. 1 old	1.40	@ 1.50
Print	1.20	@ 1.30
Container Board	1.00	@ 1.10
Bogus Wrapper	1.00	@ 1.10
Old Krafts Machine compressed bales	2.10	@ 2.20
News—		
No. 1 White News	1.65	@ 1.75
Strictly Overissue	1.05	@ 1.15
Strictly Folded	.95	@ 1.05
No. 1 Mixed Paper	.75	@ .85
Common Paper	.55	@ .65

Twines

Cotton—(F. o. b. Mill)—		
No. 1	.43	@ .48
No. 2	.41	@ .43
No. 3	.40	@ .42
India, No. 6 basis—		
Light	.19	@ .20
Dark	.17	@ .19
B. C., 18 basis	.39	@ .41
A. B. Italian, 18 Basis	.51	@ .61
Finished Jute—		
Dark, 18 basis	.30	@ .31
Light, 18 basis	.28	@ .30
Jute Wrapping, 3-6 Ply—		
No. 1	.20	@ .23
No. 2	.18	@ .20
Tube Rope—		
4-ply and larger	.15	@ .17
Fine Tube Yarn—		
5-ply and larger	.20	@ .28
4-ply	.21	@ .24
3-ply	.22	@ .25
Unfinished India—		
Basis	.14	@ .15
Paper Makers' Twine		
Balls	.12	@ .13
Box Twine, 2-3 ply	.14	@ .15
June Rope	.20	@ .40
Amer. Hemp, 6	.30	@ .32
Sisal Hay Rope—		
No. 1 Basis	.14	@ .16
No. 2 Basis	.10	@ .12
Sisal Lath Yarn—		
No. 1	.14	@ .15
No. 2	.11	@ .13
Manila Rope	.18	@ .19

CHICAGO

[FROM OUR REGULAR CORRESPONDENT]

Paper

F. o. b. Mill

All Rag Bond	35	@ 40
No. 1 Rag Bond	25	@ 35
No. 2 Rag Bond	14	@ 25
Water Marked Sulphite	9	@ 12
Sulphite Bond	6¼	@ 10¾
Sulphite Ledger	9½	@ 12
Superfine Writing	18	@ 24
No. 1 Fine Writing	14	@ 18
No. 2 Fine Writing	12	@ 14
No. 3 Fine Writing	9	@ 12
No. 1 M. F. Book	5¾	@ 7½
No. 1 S. & S. C. Book	6½	@ 7¾
Coated Book	8	@ 10
Coated Label	8	@ 10
News—Rolls, mill	3¾	@ 4½
News—Sheets, mill	4	@ 4¾
No. 1 Manila	4¾	@ 6¼
No. 1 Fibre	5	@ 5¾
No. 2 Manila	3¾	@ 4¼
Butchers' Manila	4	@ 4½
No. 1 Kraft	6	@ 6¼
No. 2 Kraft	5	@ 5¼
Wood Tag Boards	4½	@ 6
Sulphite Screenings	2½	@ 2¾
Manila Tissue, 24x36 sheet	7½	@ —
White Tissue, 20x30 sheet	7½	@ —
Boards, per ton—		
Plain Chip	50.00	@52.50
Solid news	52.50	@57.50
Manila Line Chip	60.00	@62.50
Container Lined—		
85 Test	70.00	@72.50
100 Test	75.00	@77.50

Old Papers

F. o. b. Chicago

Shavings—		
No. 1 Hard White	3.20	@ 3.25
White Envel. Cuttings	3.20	@ 3.25
No. 1 Soft Shav.	3.00	@ 3.10
No. 1 Mixed	1.55	@ 1.65
No. 2 Mixed	1.25	@ 1.30

Ledgers and Writings	1.65	@	1.70
Solid Books	1.60	@	1.65
Light Books	1.15	@	1.20
Blanks	210	@	2.15
Ex. No. 1 Manila	2.50	@	2.60
Manila Envelope Cuttings	2.60	@	2.70
No. 1	1.15	@	1.20
Folded News (over issue)	1.00	@	1.05
Old Newspapers—			
No. 1	.90	@	.95
No. 2	.85	@	.90

Mixed Papers—			
No. 1	.85	@	.90
No. 2	.75	@	.80
Straw Clippings	.95	@	—
Binders' Clippings	.90	@	—
Kraft	2.20	@	2.25
New Kraft Cuts	2.60	@	2.65
Roofing Stock, f. o. b. Chicago, Net Cash—			
No. 1	$42.00	@	—
No. 2	40.00	@	—
No. 3	38.00	@	—
No. 4	38.00	@	—

PHILADELPHIA

[FROM OUR REGULAR CORRESPONDENT]

Paper

Bonds	.09½	@	.53
Ledgers	.13½	@	.40
Writings—			
Superfine	.13½	@	.20
Extra fine	.12	@	.22
Fine	.20	@	.26½
Fine, No. 2	.16	@	.25
Fine, No. 3	.12	@	.20
Book, M. F.	.09	@	.11
Book, S. S. & C.	.09¾	@	.12½
Book, Coated	.14	@	.20
Coated Lithograph	.10	@	.13
Label	.10	@	.13
News	.05	@	.06½
No. 1 Jute Manila	.12	@	.13
Manila Sul., No. 1	.08	@	.10
Manila No. 2	.07	@	.08
No. 2 Kraft	.06	@	.08
No. 1 Kraft	.08	@	.09½
Common Bogus	.03½	@	—
Straw Board	55.00	@	60.00
News Board	42.50	@	—
Chip Board	40.00	@	42.50
Wood Pulp Board	2.75	@	3.00
(Carload Lots)			
Binder Boards—			
Per ton	70.00	@	75.00
Carload lots	65.00	@	70.00
Tarred Felts—			
Regular	61.00	@	63.00
Slaters	66.00	@	68.00
Best Tarred, 1-ply (per roll)	1.70	@	1.80
Best Tarred, 2-ply (per roll)	1.50	@	1.60
Best Tarred, 3-ply	2.00	@	2.10

Bagging

F. o. b. Phila.

Gunny No. 1—			
Foreign	1.75	@	1.85
Domestic	1.75	@	2.00
Manila Rope	5.00	@	5.50
Sisal Rope	2.50	@	—
Mixed Rope	1.25	@	—
Scrap Burlaps	1.00	@	1.25
Wool Tares, heavy	2.00	@	2.13
Mixed Strings	1.00	@	—
No. 1, New Lt. Burlap	3.50	@	3.75
New Burlap Cuttings	3.50	@	—

Old Papers

F. o. b. Phila.

Shavings—			
No. 1, Hard White	3.75	@	3.80
No. 2, Hard White	3.25	@	3.40
No. 1 Soft White	2.75	@	3.00
No. 2 Soft White	2.00	@	2.25
No. 1 Mixed	2.00	@	—
No. 2 Mixed	1.25	@	1.30
Solid Ledger Stock	1.75	@	1.90
Writing Paper	1.50	@	1.75
No. 1 Books, heavy	1.45	@	1.60
No. 2 Books, light	1.15	@	1.25
No. 1 New Manila	2.40	@	2.50
No. 1 Old Manila	1.50	@	1.75
Container Manila	1.10	@	1.15
Old Kraft	2.00	@	2.25
Overissue News	1.05	@	1.10
Old Newspaper	.65	@	.70
No. 1 Mixed Paper	.75	@	.80
Common Paper	.60	@	.70
Straw Board, Chip	.65	@	.70
Binders Bd., Chip	.65	@	.70

Domestic Rags—New.

Price to Mill, f. o. b. Phila.

Shirt Cuttings—			
New White, No. 1	.12	@	.13
New White, No. 2	.07	@	—
Silesias, No. 1	.08¼	@	.08½
New Unbleached	.11½	@	.11¾
Washable	.05½	@	.05¾
Fancy	.07	@	.07¼
Cottons—according to grades—			
Blue Overall	.09¼	@	.09½
New Blue	.03½	@	.03¾
New Black Soft	.06	@	.06¾
New Light Seconds	.03½	@	.03¾
Khaki Cuttings	.05½	@	.06
Corduroy	.04	@	.04½
New Canvas	.10½	@	.11
New Black Mixed	.05	@	.05¼

Old

White, No. 1—			
Repacked	7.50	@	8.00
Miscellaneous	6.25	@	6.50
White, No. 2—			
Repacked	.05	@	.05½
Miscellaneous	.04¾	@	.05¾
Thirds and Blues—			
Repacked	3.65	@	3.85
Miscellaneous	3.15	@	3.25
Black Stockings	4.00	@	4.50
Roofing Stock—			
No. 1	2.30	@	240
No. 2	2.20	@	2.30
No. 3	1.15	@	1.20
No. 4	2.10	@	2.20
No. 5A	1.40	@	—
B	1.25		nominal
C	1.15		nominal

TORONTO

Paper

(Mill Prices to Jobbers f. o. b. Mill)

Bond—			
Sulphite	.11	@	.12½
Light tinted	.12	@	.13½
Dark tinted	.13½	@	.15
Ledgers (sulphite)	—	@	.13
Writing	.09½	@	.12
News, f. o. b. Mills—			
Rolls (carloads)	3.65	@	—
Sheets (carloads)	—	@	4.50
Sheets (2 tons or over)	—	@	4.75
Book—			
No. 1 M. F. (carloads)	9.00	@	—
No. 2 M. F. (carloads)	8.00	@	—
No. 3 M. F. (carloads)	7.50	@	—
No. 1 S. C. (carloads)	9.50	@	—
No. 2 S. C. (carloads)	8.50	@	—
No. 1 Coated and litho	14.50	@	—
No. 2 Coated and litho	13.50	@	—
No. 3 Coated and litho	12.75	@	—
Wrapping—			
Rag Brown	4.75	@	—
White Rag	5.25	@	—
"B" Manila	5.50	@	—
No. 1 Manila	6.50	@	—
Fiber	6.50	@	—
Kraft, M. F.	7.00	@	—
M. G.	7.15	@	—

Pulp

(F. o. b. Mill)

Ground wood	$28.00	@	30.00
Sulphite easy bleaching	60.00	@	—
Sulphite news grade	50.00	@	55.00
Sulphite, bleached	80.00	@	—
Sulphate	65.00	@	—

Old Waste Paper

(In carload lots, f. o. b. Toronto)

Shavings—			
White Env. Cut	3.60	@	—
Soft White Book shavings	3.00	@	—
White Blk. News	1.90	@	—
Book and Ledger—			
Flat Magazine and Book Stock (old)	1.50	@	—
Light and Crumpled Book Stock	1.35	@	—
Ledgers and Writings	1.75	@	—
Solid Ledgers	1.75	@	—
Manilas—			
New Manila Cut	—	@	1.60
Printed Manilas	1.20	@	—
Kraft	2.05	@	—
News and Scrap—			
Strictly Overissue	1.00	@	—
Folded News	1.00	@	—
No. 1 Mixed Papers	—	@	.85

Domestic Rags—

Price to mills, f. o. b. Toronto Per lb.

No. 1 White shirt cuttings	.14	@	.14¼
No. 2 White shirt cuttings	.07	@	.07½
Fancy shirt cuttings	.07½	@	.08
No. 1 Old Whites	—	@	—
Third and blues	.05½	@	.05¾

Per cwt.

Black stockings	.04	@	—
Roofing stock:			
No. 1	2.20	@	—
No. 2	2.10	@	—
Manila rope	.06	@	.06¼
No. 2	1.55	@	—

BOSTON

[FROM OUR REGULAR CORRESPONDENT]

Paper

Ledgers—			
Sulphite	.08½	@	.18
Rag Content	.16	@	.36½
All Rag	.38	@	.50
Bonds—			
Sulphite	.07½	@	.14
Rag Content	.16	@	.33½
All Rag	.36½	@	.51
Writings	.08½	@	.20
Superfines	.20	@	.48
News	.04	@	.06½
Book, M. F.	.06¼	@	.10¾
Book, Super	.07½	@	.11
Book, Coated	.09½	@	.20
Coated Litho	.10	@	.15
Label	.09½	@	.15
Jute Manila No. 1	.12	@	.13
Manila, Sul. No. 1	.05	@	.06
Manila, Sul. No. 2	.03¾	@	.04¼
No. 1 Kraft	6¼	@	.06½
No. 2 Kraft	.05¼	@	.05½
Common Bogus	.03½	@	.04
Straw Board	50.00	@	55.00
News Board	47.50	@	50.00
Chip Board	45.00	@	47.50
Wood Pulp Board	80.00	@	85.00
Binder Boards	75.00	@	85.00
Tarred Felts—			
Regular	61.00	@	63.00
Slater's	66.00	@	68.00
Best Tarred, 1 Ply, roll	1.50	@	1.60
Best Tarred, 2 Ply, roll	1.70	@	1.80
Best Tarred, 3 Ply, roll	2.00	@	2.10

Old Papers

Shavings—			
No. 1 Hard White	4.00	@	4.25
White Blank News	1.75	@	2.00
Manila Env. Cuttings	2.80	@	3.00
No. 2 Hard White	3.25	@	3.50
No. 1 Soft White	3.10	@	3.25
No. 2 Soft White	2.25	@	2.50
No. 1 Mixed	1.60	@	1.75
No. 2 Mixed	1.25	@	1.50
Solid Ledger Stock	2.00	@	2.25
Writing Paper	—	@	1.70
No. 1 Books, Heavy	1.60	@	1.80
No. 1 Books, Light	1.40	@	1.50
No. 1 New Manila	2.50	@	2.60
No. 1 Old Manila	1.75	@	2.00
Print Manila	1.05	@	1.20
Old Kraft	2.00	@	2.25
Overissue News	1.00	@	1.20
Old Newspapers	.90	@	1.00
No. 1 Mixed Paper	.70	@	.75
Box Board, Chip	.70	@	.75

Bagging

Price f. o. b. Boston

Gunny No. 1—			
Foreign	1.12½	@	2.00
Domestic	2.00	@	2.12½
Manila Rope	6.00	@	6.50
Mixed Rope	1.50	@	1.62½
Scrap Burlaps	1.25	@	1.50
Wool Tares, heavy	2.00	@	2.13
Mixed Strings	1.50	@	1.62½
New Burlap Cuttings	2.00	@	2.25

Domestic Rags (New)

Price f. o. b. Boston

Shirt Cuttings—			
New White No. 1	.13½	@	.14
Silesias, No. 1	.09	@	.09½
New Unbleached	.12½	@	.13
Washable	.06	@	.06½
Fancy	.07	@	.07¼
Cottons — according to grades, Blue Overall	.09½	@	.10
New Blue	.05½	@	.06
New Black, soft	.06	@	.06¼
Khaki Cuttings	.05½	@	.06
Corduroy	.04	@	.04½
New Canvas	.10½	@	.11

Domestic Rags (Old)

Price f. o. b. Boston

White No. 1—			
Repacked	7.50	@	8.00
Miscellaneous	6.50	@	7.00
White No. 2—			
Repacked	5.50	@	6.00
Miscellaneous	4.75	@	5.50
Thirds and Blues—			
Repacked	3.75	@	4.00
Miscellaneous	3.00	@	3.25
Roofing Stock—			
No. 1	2.25	@	2.37
No. 2	2.12½	@	2.25
No. 3	1.50	@	1.75
No. 4	1.15	@	1.20

Champion Coated Paper Co. Orders Large Turbine

HAMILTON, Ohio, October 14, 1924.—One of the largest turbines for installation in a United States paper mill was recently ordered by the Champion Coated Paper Company. The machine is a 6,000-kilowatt, multi-stage, high economy condensing turbine and will operate in parallel with a 2,000-kilowatt, non-condensing machine.

The turbines will be of General Electric manufacture. The back pressure governor, located in the process steam line, and operating the synchronous motor of the governor on the non-condensing machine, determines the speed setting of the governor, and, therefore, the amount of steam admitted to the turbine throttle.

A direct relation will exist between the exhaust pressure and electrical load, meaning that the 2,000-kilowatt unit will carry sufficient load at all times to furnish the exact amount of process steam required, the 6,000 kilowatt high economy turbine taking the fluctuating load.

New York Market Review

OFFICE OF THE PAPER TRADE JOURNAL,
Wednesday, October 15, 1924.

The paper market has moved forward onto more favorable vantage ground during the past week and every line has participated to a greater or lesser extent in the real revival of business which is taking place. The subject most discussed during the week was the recent announcement of a cut in the 1925 price of news print. The new price of $70 per ton is greeted everywhere as a very considerate price and there is general satisfaction among the big consumers of news print. It is anticipated that the new price will result in an unusually large demand for 1925 and that the coming year may make a new record. The paper mills are now comfortably busy. It cannot be said that they are rushed now as they are sometimes but no one who has been in close touch with the paper situation expected that they would be. They are in far better shape at the present time, however, than was generally anticipated six weeks ago when business was lagging and showing little or no disposition to pick up. The holiday orders are now coming in in volume and are giving a new impetus to several lines. These orders are unusually late this year which shows that buyers have been in a quandary to guess how good holiday trade would be. Conditions were so unsettled that it looked for a time as though the holiday trade would be far below normal. Therefore they bought cautiously. More recent conditions have put a new complexion on matters and has caused many buyers to decide that they have been too conservative and have under-estimated the volume of holiday trade. As a result they are placing new orders to guard against going short. As time goes on politics seem to have less and less affect on business and there is less skepticism on that score. With the election only three weeks off it will not be long before the political situation will cease to be a shadow hovering over business in general and then the paper industry, as well as everything else, will be back on terra firma again. But, leaving all that aside, the market is today in a very satisfactory condition and paper men are unanimous in the opinion that when fall winds up and we graduate into winter they will find that the business done since the first of September will not be far under the normal for the fall period.

News print is running along in excellent demand. The unusually early announcement of the new 1925 price and the very satisfactory figure quoted has already brought renewal of contracts from many of the big publishers and other large users. A normal demand, it is expected, will be filled during the remainder of the year and, after January 1, the demand may start to run up a new score for consumption of news.

The demand for book papers is constantly improving. Printers are much busier than they have been. Orders for book paper from them and from other sources are steadily increasing.

Writing papers are also feeling a new prosperity which is due in a large degree to belated holiday ordering although that is not the only thing that is stirring them up.

Tissues are doing so much better now that the tissue men have almost forgotten their troubles of the summer months when tissues were dull almost beyond precedent.

Every line may be spoken of in similar terms. There is no longer the indifference on the part of the buyers which prevailed so long. Today, in place of indifference, one is confronted by actual orders or by inquiries which emanated from the serious minded and not from triflers. It is a good healthy situation with a promising future perspective.

Mechanical Pulp

Mechanical pulp prices are strong at the present writing and the market is doing brisk business. It is common knowledge that there is no great surplus of available stock and there seems to be an eagerness to pick it up about as rapidly as it finds its way to the market. The likelihood of a price increase in the near future probably intensifies this desire.

Chemical Pulp

Practically the same may be said of chemical pulp. Bleached sulphite is in especially good demand and all grades have a satisfactory call.

Rags

There was a strong demand for rags during the past week. The shortage in rags has by no means been corrected but collections are getting better all the time and there is not the grave shortage that there was at one time. Whatever one wants in the rag line can be procured if one is willing to pay the price and goes to the proper place to procure it but there are many cases where the mills, desirous of getting a certain grade of rags, have difficulty in getting just what they want or in locating the quantity desired. Consequently trading in the rag market at the present time has become more or less of a game of hide and seek.

Old Rope and Bagging

Old rope and bagging continues on the upgrade. Business in these lines cannot be spoken of as particularly good but it is considerably improved and there seems hope for the future.

Waste Paper

Another good week was experienced by waste paper. The demand is getting better all the time and orders and inquiries are coming in with greater frequency. November should find the waste paper market much more active than it is now.

Twine

Somewhat better are the twine conditions today. The come-back is slow after the months when business was practically flat but for three weeks now there has been a gradual gain—very slow but at least promising for it has turned the corner.

Demand Rather Slow in Boston

[FROM OUR REGULAR CORRESPONDENT.]

BOSTON, Mass., October 14, 1924.—The paper trade in Boston for the past week has been only fair. The trading is spotty on all sides and sales have been made only after extra pressure has been exerted. The printing trades are active and there is a steady brisk call for all kinds of printing stocks. At this time the political situation is calling for lots of coated board for posters, cards and signs and other stocks, etc.

Paper box plants continue to be busy but have ample stocks of board for some time yet and for this reason the box mills report that orders are slow from this source. Business generally seems better and with the approach of the holidays, it is natural that the demand for set up boxes and folding boxes of all kinds should show activity.

The local jobbing business has slowed up appreciably during the past two weeks and it is doubtful if the sales sheets will show up as well as last month. Sales conferences and drives to the contrary, business is quiet and orders have to be literally dragged in. Buyers are most cautious not to overload as they are all keeping an eye on the inventory sheet and looking forward to the end of the year and the showing they wish to make at that time.

Competition is very keen in Kraft and the trade would eagerly welcome any move that would help to improve the situation.

A. C. Hall, sales manager and treasurer of John Carter & Co., has gone to the Connecticut Lakes in northern New Hampshire for a two weeks rest.

The Poland Paper Company of Mechanics Falls, Me., are sending out a beautiful direct mail piece of literature featuring their new line of Waterfalls Bond. The scene which attracts ones attention is a six color offset reproduction of a waterfall and it is indeed beautifully done.

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It sorts o' wraps you round and round
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Some portion of our clay production is *pulverized*. That part of it which is *pulverized* is, as far as we know, the only *pulverized clay* which is washed and refined before being pulverized.

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Importers of Chemical Pulps

BLEACHED and UNBLEACHED

Agents for Kellner Partington Paper Pulp Co., Ltd.
Sarpsborg, Norway; Forshaga, and Edsvalla, Sweden.
Kronstädter Papierstoff—Fabriks Actien—Gesellschaft
Mills at Tuciansky, Sv. Martin

Miscellaneous Markets

OFFICE OF THE PAPER TRADE JOURNAL,
Wednesday, October 15, 1924.

With the chemical market still trembling with the expectation of price announcements, business continued during the past week to suffer as a result of the expectancy. This does not mean that business fell off but it does mean that the watchful waiting again held off orders which would otherwise come through. Rarely are new price announcements awaited more eagerly or discussed more vigorously than at the present time. Buyers feel that prices are at the present time too high on some of the leading chemicals. From what can be learned, however, it is believed that the manufacturers are not inclined to make price reductions and that they are determined to maintain the present price schedule for the most part. Whatever they do will probably give the market a degree of new impetus. One way or the other, the result will be the same. The announcement will open the floodgates and let in business that is now occupying the doubtful seat. Buying has been for so long of a hand to mouth character that a more generous buying attitude cannot be postponed much longer. Fall business, however, in spite of everything, is doing very nicely. The past week saw the same slow progress being made and it will not take a great deal now to put business within close range of the normal Fall demand. Conditions in general are very encouraging, most of the industries and trades which are the mainstay of the chemical market growing more active constantly and therefore using greater quantities of chemicals. Some of the more serious labor troubles which had their effect on the chemical demand have been smoothed out or are on the point of being smoothed out so that the future looms up very promisingly. The paper industry is calling for increased supplies weekly now and the demand from that source is much greater than it was a month ago with every prospect of further increases as the mills are rapidly falling into a faster stride. Not only may business be soon restored to normal but it may rise to unexpected heights to make up for the long pent up condition of the chemical trade.

BLANC FIXE.—Blanc fixe continues to come along nicely. It has showed a very acceptable gain during the past two weeks and there is no indication of any let up. If it continues as it is going it will be in fine shape by the first of November. The present price is from $75 to $80 a ton for the powder and from $50 to $55 for the pulp.

BLEACHING POWDER.—Bleaching powder is one of the commodities on which a new price announcement is awaited and it is not likely that the demand here will gather its full momentum until the new price is known and the users know just what to depend on. It is a purely speculative question whether any concession from the present price will be granted under the new schedule. The price today is from 1.90 to 2.15 cents a pound.

CAUSTIC SODA.—The same condition prevails regarding caustic soda that has just been stated in connection with bleaching powder. There is a shortage of stock in the market, the demand is constantly improving and would undoubtedly improve even more rapidly if there was no uncertainty regarding the price in the future. The new price announcement is expected at the same time the price on bleaching powder is given out. At present it is selling for from 3.10 to 3.15 cents a pound on a flat basis at the works.

CASEIN.—Casein has just passed through a slightly better week than it has been having. Competition continues very keen and prevents the price from rising. It is quoted at from 10½ to 11 cents a pound.

CHINA CLAY.—China clay keeps on as one of the active chemicals with the demand showing constant improvement. There is no fault to find with its present condition. The price holds at from $16 to $20 a ton for the imported grades and from $12 to $15 a ton for the domestic.

CHLORINE.—Chlorine is another chemical around which speculation is thrown by a delay in price announcement. Demand is fair but here again the awaiting of a new price schedule is undeniably holding back some orders. It is now quoted at from 4.50 to 7.00 cents a pound in tanks.

ROSIN.—Rosin is continuing to meet a good and improving demand. Many orders are coming in from abroad and the home demand is almost normal for this time of year. It is quoted at $6.00 although some reports are heard of sales at a better figure.

SALT CAKE.—Salt cake experienced another banner week and is one of the active items of the market. Some of the trades and industries which use large quantities of salt cake have undergone rapid improvement of late and salt cake as a result is continually brightening up. There is no change in the price which is still from $17 to $20 a ton.

SODA ASH.—The price announcement again figures in the case of soda ash. The demand is excellent but because of the almost universal use of this commodity and because of the hovering change in price, soda ash is not getting where it would if buyers could know whether the new price is to be the same, higher or lower. It is now selling at 1.38 cents a pound on a flat basis at the works.

SULPHATE OF ALUMINA.—Sulphate of alumina is now traveling along the smoother path common to most of the chemicals. The demand for several weeks now has showed a consistent improvement and the commodity is not far from its normal Fall demand. It is quoted at from 1.30 to 1.35 cents for the commercial grade at the Eastern works and from 2.10 to 2.25 cents a pound for iron free.

SULPHUR.—Sulphur is answering its regular contract demand and its price holds firm at from $18 to $19 a ton.

TALC.—Talc is slowly picking up although its demand is still far from normal. The price is still from $16 to $17 a ton.

Work of Waxed Paper Association

Exceedingly important work in behalf of manufacturers of waxed paper is being done by the American Waxed Paper Association, of which O. M. Porter, with offices at 18 East 41st street, New York City, is secretary.

Among the problems which are approaching solution through the activities of the Association are the establishment of trade customs equitable both to the buyer and seller of waxed paper and waxed paper products, the elimination of bad trade practices, the development of effective credit bureau service and uniform cost accounting methods, and other similar problems involving the general welfare of the waxed paper industry.

The Association is also carrying on some exceedingly interesting research work relating to the development of special wrappers for various food products.

Secretary of Kraft Men Visits Washington

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., October 15, 1924.—C. E. Dobson, secretary of the Southern Kraft Manufacturers Association, of New Orleans was in Washington last week taking up various problems with government officials. He was particularly interested in both domestic and foreign markets and spent some time at the Bureau of Standards and at the Paper Division of the Department of Commerce.

Empire State Forests Products Association to Meet

The nineteenth annual meeting of the Empire State Forest Products Association will be held at the Hotel Utica, Utica, N. Y., on Thursday, November 13, 1924. Tentative plans for the meeting include a thorough discussion of the forest policy of New York State, at which leading representatives of all sides of this question will be present. Details of the program are now in preparation.